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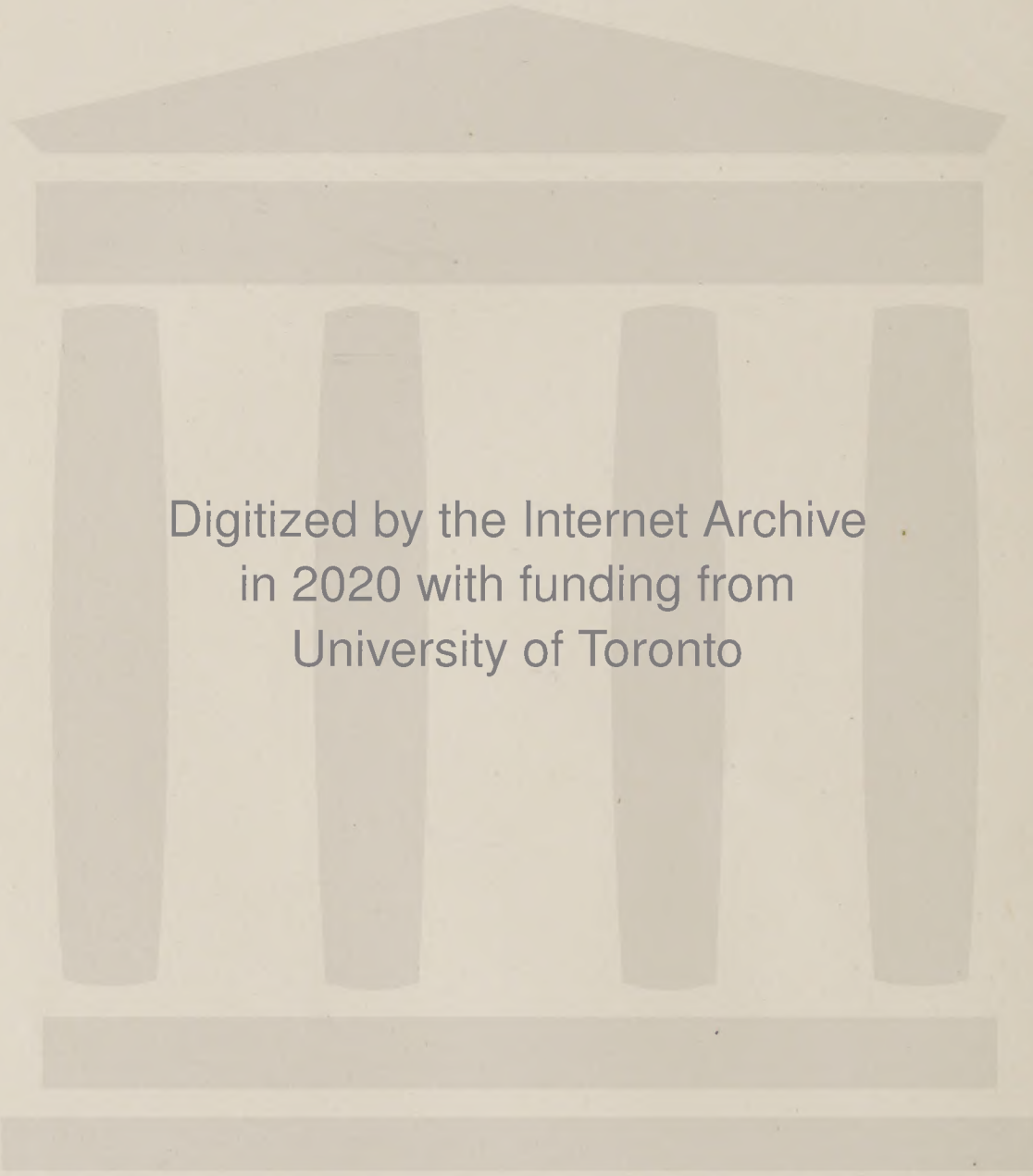
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Education Department, Ontario.
ANNUAL EXAMINATIONS, 1895.
HIGH SCHOOL ENTRANCE.
ENGLISH GRAMMAR.

Examiners: { J. C. MORGAN, M.A.
 { J. J. CRAIG, B.A.

Values.

- | | |
|----|---|
| | 1. <i>Just below</i> the rapids, among the bushes and stumps of a rough clearing, <i>made in constructing</i> it, <i>stood</i> a palisade fort, the <i>work</i> of an Algonquin war party in the past autumn. |
| 8 | (a) Analyse the above sentence. |
| 12 | (b) Parse the italicised words. |
| 22 | 2. Classify clearly the phrases and dependent clauses in the following:—
“The valley, which was bathed in the light of a harvest moon, seemed, while I gazed in silent delight, almost like a heaven upon earth. But, in a moment, the hideous Iroquois war-whoop rang in my ears that had been drinking in the waterfall’s music, and I turned and fled for my life.” |
| 7 | 3. Give corresponding noun form for <i>free</i> , <i>bold</i> , <i>wise</i> , and corresponding adjective form for <i>strength</i> , <i>forget</i> , <i>command</i> , <i>exhaust</i> . |
| | 4. Write out:— |
| 3 | (a) the plural of <i>duchess</i> , <i>madam</i> , <i>German</i> , <i>seraph</i> , <i>spoonful</i> , <i>cloth</i> ; |
| 3 | (b) the possessive singular and possessive plural of <i>who</i> , <i>potato</i> , <i>lady</i> ; |
| 4 | (c) the other gender form of <i>marquis</i> , <i>witch</i> , <i>tiger</i> , <i>stag</i> , <i>ewe</i> , <i>heroine</i> , <i>czar</i> , <i>mamma</i> . |

[OVER.]

Values.

5. Correct where necessary, giving reasons for any changes which you make :

- 5 (a) That don't make no difference either to John or I
 or you.
- 3 (b) Each of the spectators promised their aid.
- 2 (c) In what county is the city of Toronto in ?
- 7 (d) Don't let on I told you for just as like as not he
 done it real good.

12 6. Frame sentences, one in each case, illustrating the use of the past tense of the following verbs :—

raise, set, fly, rise, lay, wear.

12 7. Rewrite the following, changing the verbs now in the Passive conjugation (voice) to the Active, and those now in the Active conjugation (voice) to the Passive :—

“The king took the petition, and when it had been sufficiently considered, his opinion was decidedly given so that the courtiers entertained no doubt as to the wisdom of his decision.”

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

HIGH SCHOOL ENTRANCE.

GEOGRAPHY.

Examiners: { J. F. WHITE.
J. J. TILLEY.

Values.

- | | |
|----|--|
| 13 | 1. Why have we in Canada longer daylight in summer than in December? In what regions of the world does the length of night and day vary the most? What would happen in regard to night and day if the earth turned twice as fast? if it turned in the opposite direction? |
| 15 | 2. Outline a map of North America, the full size of your answer paper, marking thereon the countries, (the divisions of Central America need not be noted,) the great mountain chains, and four or five of the largest rivers. Show also the position of the Great Lakes and of the most important coast waters. |
| 10 | 3. Locate five or six of the principal seaports of Canada. State the countries with which they have the most commerce, and name the chief articles of the trade carried on through these ports. |
| 8 | 4. (a) Describe three different routes to Calcutta from Montreal. Give reasons for preferring any one if you were making the journey. |
| 5 | (b) Point out the several ways of going from Ottawa to Hamilton, and from Toronto to Sarnia, by rail or by boat, naming in order the railways or the waters passed over |
| 12 | 5. Compare, in regard to position, physical features and climate, Ontario, with <i>either</i> British Columbia <i>or</i> Manitoba. |
| 12 | 6. Locate each of the following, tell what it is, and state any matter of interest in connection with it:—
Sahara, Fundy, Ceylon, Behring, Liverpool, Suez, Nile, Constantinople. |

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

HIGH SCHOOL ENTRANCE.

COMPOSITION.

Examiners : { J. E. HODGSON, M.A.
 { JOHN SEATH, B.A.

Values.

50

1. Write a composition of about *thirty* lines, taking as the subject *one* of the following marked *a*, *b*, *c*, *d*, *e* :—

(*a*) The Conspiracy of Pontiac.

(*b*) The Red River Rebellion (1869–1870).

(*c*) The Conquest of Bengal.

(*d*) The facts implied in the poem entitled “The Song of the Shirt.”

(*e*) A description of the Niagara River.

50 =

48 + 2

2. (*a*) Write a letter to a friend in California, giving an account of any event which you have observed, or of which you have read.

(*b*) Write the address for your letter within a ruled space the size of an ordinary envelope.

(*c*.)

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ANNUAL EXAMINATIONS, 1895.

HIGH SCHOOL ENTRANCE.

DICTATION.

Examiners: { J. J. CRAIG, B.A.
J. C. MORGAN, M.A.

NOTE.—The Presiding Examiner shall read each sentence three times—the first time, to enable the candidate to collect the sense; the second, slowly, to enable the candidate to write the words; and the third, for review.

1. He had stripped off his coat and waistcoat, and was busily at work in his shirt-sleeves.

2. Rain is, therefore, but a further stage in the condensation of aqueous vapor caused by the chilling of the air.

3. The natives were called Indians, an appellation which has since been extended to all the aborigines of the New World.

4. In spite of a brisk fire, they reached the palisade, and, crouching below the range of shot, hewed furiously with their hatchets to cut their way through.

5. They had no pretty flowers, and there was no one to admire their beautiful green foliage except a few croaking reptiles, and little crickets and grasshoppers.

6. This species of movement appeared suspicious to the Ethiopian, who, on his part, prepared himself, as quietly as possible, to interfere, the instant that interference seemed necessary.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

HIGH SCHOOL ENTRANCE.

ARITHMETIC.

Examiners: { D. ROBB.
J. J. TILLEY.

NOTE.—No value shall be given question 1 (a) unless the result is absolutely correct.

Values.

$10 + 4$
 $+ 2 =$
16

1. (a) Make out the following account neatly, accurately and in proper form. All fractions are to be retained:

John Wilson bought from you to-day :

$7\frac{1}{2}$ lbs.	Cheese	-	@	$12\frac{1}{2}$ c.	per lb.
$6\frac{1}{4}$	" Butter	-	@	23 c.	" "
$2\frac{1}{2}$	" Tea	-	@	55 c.	" "
27	" Sugar	-	@	\$1	per 12 lbs.

(b) He paid you cash and you allowed him 5 % off.

(c) Receipt the account.

12 2. Find the simple interest on \$912.50 at 8 % from 13th February, 1893, to 19th December, 1894. (Year = 365 days.)

12 3. A farmer sold a load of barley, weighing 2712 lbs., when barley was 40 cents per bushel. In weighing the grain the dealer made a mistake and took it as rye and paid for it at 49 cents per bushel. How much did the farmer gain or lose by the mistake?

12 4. A cord of wood and one hundred bushels of grain fill equal spaces. A cubic bin whose edge is 12 feet contains 45900 lbs. of grain. Find the weight of one bushel of this grain.

[OVER.]

Values.

12 5. Find the expense of sodding a plot of ground, which is 40 yards long and 100 ft. wide, with sods each a yard in length and a foot in breadth: the sods when laid costing 75 cents per hundred.

12 6. A can walk $3\frac{1}{3}$ miles in 50 minutes, and B can walk $2\frac{1}{4}$ miles in 36 minutes. How many yards will A be ahead of B when A has gone 6 miles, if they start together?

12 7. A can do a piece of work in $\frac{2}{3}$ of a day and B in $\frac{1}{2}$ of a day. In what time can both together do it? If \$1.40 be paid for the work, how much should A receive?

$$\frac{7+5}{12} =$$

8. (a) Simplify

$$3\frac{1}{2} + \frac{2\frac{1}{2} - \frac{1}{8}}{2\frac{1}{2} + \frac{1}{8}} - \frac{7}{10} \text{ of } 3\frac{1}{3} - \frac{5}{6},$$

and (b) divide 6 by .000725 correct to four decimal places.

(A.)

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ANNUAL EXAMINATIONS, 1895.

HIGH SCHOOL ENTRANCE.

DRAWING.

Examiners: { J. C. MORGAN, M.A.
J. E. HODGSON, M.A.

Values.

- | | |
|---|---|
| 9 | 1. Draw two horizontal lines, each 4 inches long and half inch apart, divide (by perpendicular lines) the space between them into squares, draw all the diagonals of the squares, above each square draw an isosceles triangle having the upper side of the square as its base, and each of its sides equal to half its base, and below the squares draw semicircles having as diameters two of the lower sides of the squares. |
| 8 | 2. Draw from memory a vase 4 inches high, containing a spray of any flower with which you are acquainted. |
| 8 | 3. Make a drawing of an ordinary square four-legged table with a small coal oil lamp standing on it, the top of the table being slightly below the eye. |

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ANNUAL EXAMINATIONS, 1895.

HIGH SCHOOL ENTRANCE.

HISTORY.

Examiners: { J. J. CRAIG, B.A.
J. C. MORGAN, M.A.

NOTE.—Candidates will take any two questions in British History and any four in Canadian.

Values

I.

BRITISH HISTORY.

- | | |
|----|---|
| 12 | 1. Describe fully the character and customs of the Ancient Britons. State the most important effects produced by the invasion of Britain (a) by the Romans, (b) by the Saxons. |
| 12 | 2. Sketch briefly the reigns of two sovereigns whose misrule was the source of great benefit to England. Give the beneficial results in each case. |
| 12 | 3. For what is each of the following persons noted:—William Caxton, William Wilberforce, Lord Nelson, John Hampden, John Howard, Florence Nightingale? |
| 12 | 4. Write notes on any <i>four</i> of the following:—
(a) The Interdict.
(b) Act of Supremacy.
(c) The Mayflower.
(d) Habeas Corpus Act.
(e) Petition of Right.
(f) Chartists.
(g) Indian Mutiny.
(h) Conquest of Wales. |

[OVER.]

CANADIAN HISTORY.

- | | |
|----|--|
| 13 | 5. Name the principal grounds of dispute between the French and English Colonists in North America. |
| 13 | 6. What caused the war with the United States in 1812? Sketch its progress. |
| 13 | 7. Outline Lord Elgin's administration in Canada. |
| 13 | 8. What is a Treaty? Explain fully, "The Ashburton Treaty," "The Reciprocity Treaty between Canada and United States." |
| 13 | 9. Sketch the British North America Act.
What brought it about? |
| 13 | 10. Write notes on the following :—
Federal Union.
Legislative Union.
The Seigneurs.
Responsible Government. |

[OVER.]

Values.	
4	(c) Give the lines that contain the subject of the extract.
$2 \times 7 = 14$	2. Explain the meaning of each of the parts in italics.
2	3. (a) Why is he termed a "reverend <i>champion</i> "?
$2 \times 4 = 8$	(b) Show the appropriateness of "comfort came down," l. 13; "His last <i>faltering</i> accents <i>whispered</i> praise," l. 14; "the <i>struggling</i> soul," l. 12.
8	4. State in your own words how the preacher resembles a tall cliff.

II.

The Genius, being *moved with compassion* towards me, bid me quit *so uncomfortable a prospect*. 'Look no more,' said he, 'on man in his *first stage of existence*, in his setting out for eternity; but cast thine eye on that thick mist into which the tide bears the several generations of mortals that fall into it'

I directed my sight as I was ordered, and, whether or no the good Genius strengthened it with any supernatural force, or dissipated part of the mist that was before too thick for the eye to penetrate, I saw the valley opening at the farther end and spreading forth into an immense ocean, that had a huge rock of adamant running through the midst of it, and dividing it into two equal parts. The clouds still rested on one-half of it, inso-much that I could discover nothing in it; but the other appeared to me a vast ocean, planted with innumerable islands, that were covered with fruits and flowers, and *interwoven with a thousand little shining seas* that ran among them.

$2 \times 4 = 8$	1. Explain the meaning of each of the italicized parts.
$6 + 4 = 10$	2. What explanation did the Genius give of that half of the ocean that was "planted with innumerable islands?" What are we to infer of the other half covered with mist?
10	3. Tell what the Vision of Mirza treats of, explaining what is meant by the great tide; the bridge with arches, some broken; the innumerable trap doors and their position; the persons with scimitars, etc.

III.

$$\begin{array}{r} 1 \times 5 = \\ 5 \end{array}$$

- (a) How sleep the brave who sink to rest,
With all *their country's wishes* blest.
By fairy hands *their knell* is rung;
By forms unseen *their dirge* is sung;
There Honor comes, a *pilgrim gray*,
To bless the turf that wraps their clay;
And Freedom shall a while repair,
To dwell a weeping *hermit* there.

$$\begin{array}{r} 2 \times 3 = \\ 6 \end{array}$$

- (b) Swart and sunburnt gangs of young Frenchmen, not a few with a *slight tinge of Indian blood derived from some Huron ancestor*, *congregate at the familiar rendezvous*. These fine fellows have *vigor and courteous demeanor with the garrulous good-humor* of the Frenchman; their rough dress is *appropriate and quaint*, and is usually *lit up coquettishly* with some bright color.

1. Explain the meaning of the italicized parts in each of the above.

$$\begin{array}{r} 5 + 4 = \\ 9 \end{array}$$

2. Give in your own words the meaning of each of the extracts.

IV.

10

Quote ONE of the following:—

- (a) Lead, Kindly Light.
(b) The Three Fishers.
(c) The stanzas from "The Skylark" describing what the music of the Skylark is like, beginning "What thou art we know not."
(d) The stanzas from "The Elegy in a Country Churchyard" descriptive of the life of "the rude forefathers of the hamlet", beginning "The breezy call of incense-breathing morn."

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

HIGH SCHOOL ENTRANCE.

WRITING.

Examiners: { D. ROBB.
 { J. E. HODGSON, M.A.

Values.

13

1. Write the following:—

LL.B., MSS., N. Z., Y. P. S. C. E., S. T. D., Brig.-
Gen., inst., ult., My Dear Sir, July 1st, 1895.
1, 2, 3, 4, 5, 6, 7, 8, 9, 0.

12

2. Write the following:—

Sunset and evening star,
And one clear call for me!
And may there be no moaning of the bar,
When I put out to sea.

For tho' from out our bourne of Time and Place
The flood may bear me far,
I hope to see my Pilot face to face
When I have crost the bar.

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ANNUAL EXAMINATIONS, 1895.

HIGH SCHOOL ENTRANCE.

PHYSIOLOGY AND TEMPERANCE.

Examiners: { J. J. CRAIG, B.A.
D. ROBB.

Values.

- | | |
|----|--|
| 3 | 1. (a) Name the organs of mastication. |
| 6 | (b) Classify the permanent teeth. |
| 6 | (c) Give the principal causes of injury to the teeth. |
| 15 | 2. Give the name and the source of each of the fluids that aid in the process of digestion. |
| 7 | 3. (a) Give the constituents of the blood. |
| 8 | (b) Describe the structure of the heart. |
| 8 | 4. (a) How is the heat of the body kept up? |
| 7 | (b) Why is the sense of heat felt after partaking of alcohol? |
| 5 | 5. (a) What is the name of the active injurious principle in tobacco? Wherein does its action differ from that of alcohol? |
| 5 | (b) Explain the effect of tobacco on the nervous system. |
| 5 | (c) Give the effects of alcohol on the stomach. |

Education Department, Ontario

ANNUAL EXAMINATIONS, 1895.

HIGH SCHOOL ENTRANCE.

READING.

Examiners: { JOHN SEATH, B.A.
 { J. E. HODGSON, M.A.

In the examination in Reading, the local examiners shall use one or more of the following passages, paying special attention to Pronunciation, Emphasis, Inflection, and Pause. They shall also satisfy themselves by an examination on the meaning of the reading selection, that the candidate reads *intelligently* as well as intelligibly. Twenty lines, at least, should be read by each candidate.

SELECTIONS.

Lesson XXXV.—Resignation.

“ LXXVI.—Landing of the Pilgrims.

“ LXXXVIII.—The Demon of the Deep.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

ENGLISH GRAMMAR AND RHETORIC.

Examiners : { J. C. MORGAN, M.A.
J. J. CRAIG, B.A.

Values

- | | |
|----|--|
| | 1. "On the top of a windmill, <i>of</i> which the solid tower is still <i>to be seen</i> on the ridge <i>overhanging</i> the field, the King, who had his head quite bare, remained in absorbed silence, <i>whilst</i> the young Prince, who had been knighted a <i>month before</i> , <i>went</i> forward with his companions in arms into the thickest of the fray." |
| 24 | (a) Analyse fully, giving classification and relation of each phrase and subordinate clause. |
| 14 | (b) Classify and state clearly the relation of the italicized words. |
| 6 | 2. (a) Define "conjugation," "mood," "strong verb." |
| 4 | (b) Of what use is the passive conjugation? |
| 7 | (c) Discuss the question, "What sort of verbs can be used in the passive conjugation?" |
| 3 | 3. (a) Define gender, and explain clearly the distinction |
| 4 | between gender and sex. |
| 10 | (b) Give the other gender form for testator, friar, votary, painter, sultan. |
| | 4. Explain briefly the difference in meaning between |
| 3 | (a) "Happier than any king" and "Happier than any other king"; |
| 3 | (b) "I found the way easy" and "I found the way easily". |
| 3 | (c) "The Secretary and the Treasurer" and "The Secretary-Treasurer". |

[OVER.]

Values

- | | |
|-------------|--|
| 5
5
7 | 5. Write a complex interrogative sentence, a simple imperative sentence with preposition phrase, a compound and complex sentence with adverbial clause. |
| 3
5
3 | 6. (a) Give the derivation of "antecedents," "contradict," "suggestion," explaining the force of each prefix or affix. Give the corresponding adjective for each of the three words. |
| 3+3 | (b) What is a diminutive? Give diminutives of "lamb," "hill," "goose." |
| 16 | 7. He has finished <i>what</i> I asked him to do.
I do hope <i>that</i> I shall pass.
<i>What</i> do you see there?
<i>That</i> man is my brother.
<i>What</i> kinds of fruit do you like <i>best</i> ?
He killed the dog <i>that</i> bit me.
" <i>What!</i> do you mean it?"

Classify the italicised words in the above, and explain fully and carefully the relation of each. |
| 3 | 8. (a) State the general rule for the position of related words, and illustrate by changing as often as you can the position of <i>only</i> in the following sentence, giving the meaning in each case:— |
| 8 | "I only eat one apple." |
| 8 | (b) Rewrite the following so as to remove any ambiguity:—
"He caught his brother and shut him up in his own room which he opened." |

Education Department, Ontario

ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

GEOGRAPHY.

Examiners: { J. J. TILLEY.
J. F. WHITE.

Values.

15

1. (a) Why is it that in some parts of the Arctic regions there are nearly six months of day and six months of night?

(b) State clearly why there are four seasons in the Temperate Zone.

(c) What would be the effect on the seasons if the axis of the earth were perpendicular to the plane of its orbit?

16

2. (a) Draw an outline of the Canadian Pacific Trans-continental Railway, and of its tributary branches in Ontario.

(b) Show the position of the cities situated on the main line or branches.

16

3. Name in order the waters through which a ship would pass in sailing from St. Petersburg to Chicago.

16

4. (a) Name four of the principal manufacturing centres of Great Britain and Ireland, and state for what manufacture each is noted.

(b) Name four of the principal seaports in Great Britain and Ireland, and describe the foreign trade carried on at each seaport.

12

5. Name four of the most important British colonies, and give the principal export trade carried on by each of them.

[OVER.]

Values.

- 13 6. Show how the geographical position of Britain has affected the progress of the nation and the occupations of the people.
- 12 7. Where and what are:—Orinoco, Havana, Callao, Tasmania, Ulundi, Sunda, Tigris, Nepaul, Elburz, Etna, Elba, Idaho?

(G.)

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

ENGLISH COMPOSITION.

Examiners: { J. E. HODGSON, M.A.
 { JOHN SEATH, B.A.

Values.

100

Write a composition of about sixty lines on *one* of the following subjects, taking the topics given as an outline :

(1) A RAILWAY JOURNEY.—*Topics :*

- (a) The place from which you set out, and the place visited.
- (b) The object of the journey.
- (c) An incident at the station before your departure.
- (d) The appearance of the country passed through.
- (e) A description of the place visited.
- (f) The result of your visit.

(2) A HAUNTED HOUSE.—*Topics :*

- (a) The Current Story.
- (b) Its effect on the people of the neighborhood.
- (c) Its effect on your own mind.
- (d) The surroundings of the house.
- (e) The interior of the house.
- (f) The probable origin of the story.
- (g) Reflections on Superstition.

(3) A LETTER TO A FRIEND.—*Topics :*

- (a) Acknowledge receipt of a letter informing you of your correspondent's success in business.
- (b) Your pleasure at his good fortune.

[OVER.]

- (c) A statement of the responsibilities and opportunities arising from such success.
- (d) A description of the way in which he should employ his opportunities.

(4) WAYLAND SMITH.—*Topics* :

- (a) His introduction to Tressilian.
- (b) An account of his experience as Artist, Physician, Blacksmith.
- (c) The blowing up of the Smithy.
- (d) Incidents at "an Inn in the town of Marlborough."

Kenilworth, Chap. XI.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

ARITHMETIC AND MENSURATION.

Examiners : $\left\{ \begin{array}{l} \text{D. ROBB.} \\ \text{J. J. TILLEY.} \end{array} \right.$

Values.

$$\begin{array}{r} 5+5+ \\ 5=15 \end{array}$$

1. (a) Resolve 34650 and 43890 into their prime factors, and from inspection of these write in *prime factors* :

(i) their L. C. M. and G. C. M. ;

(ii) the quotient when the second number is divided by the first.

$$\begin{array}{r} 5+5= \\ 10 \end{array}$$

(b) Simplify :

$$(i) \quad \left(\frac{\frac{1}{2} - \frac{1}{3}}{\frac{1}{2} + \frac{1}{3}} + \frac{\frac{1}{3} - \frac{1}{4}}{\frac{1}{3} + \frac{1}{4}} \right) \div \left(\frac{\frac{1}{4} - \frac{1}{6}}{\frac{1}{4} + \frac{1}{6}} - \frac{\frac{1}{6} - \frac{1}{8}}{\frac{1}{6} + \frac{1}{8}} \right)$$

$$(ii) \quad \frac{.5 - .\dot{3}}{.5 + .\dot{3}} + \frac{.8\dot{3} + .2}{.75 - .125}.$$

25

2. A bookseller gives a discount of 5 % for cash, and allows teachers a second discount of 10 % on all cash prices. A teacher paid \$5.13 for a book: what is the marked price?

25

3. What is the value of a house if the insurance premium of $\frac{3}{4}$ % on $\frac{2}{3}$ of its value, including 50 cents for the policy, equals \$6.50?

25

4. A and B entered into a partnership to carry on a mercantile business for one year. A put in \$900 at first and at the end of 4 months withdrew \$300. B put in \$600 at first and at the end of 4 months put in \$300 more. They gained \$3000. What was each one's share of the gain?

[OVER.]

Values.

25

5. \$1200.

Toronto, Oct. 12th, 1892.

One year from date we promise to pay John Smith, or order, twelve hundred dollars, with interest at 6 % per annum. Brown & Jones.

Endorsed as follows:—Oct. 15th, 1893, \$1000; April 15th, 1894, \$200. How much remained due Oct. 15th, 1894? (*Reckon the time in months.*)

25

6. A retired farmer invests 40 % of his capital in $3\frac{1}{2}$ per cent. stock at 90, and the remainder in 4 per cent. stock at 95: his income is \$698 per year. What capital has he invested?

25

7. The base of an isosceles triangle is 20 feet, and each of the two equal sides is $15\frac{1}{2}$ feet. What is the altitude of the triangle?

25

8. A man can run the length of the diagonal of a rectangular field containing 6 acres whose sides are as 5 to 12 in $3\frac{1}{4}$ minutes: find his rate of walking in miles per hour.

(A.)

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

DRAWING.

Examiners: { A. C. CASSELMAN.
J. J. TILLEY.

Values.

7

1. Copy, in pencil, with a clear outline, the figure printed below, making it a little larger, but of similar proportions:—



[OVER.]

9

2. Draw freehand a rectangular solid $1'' \times \frac{3}{4}'' \times 3''$, as it would appear, when resting on one of its largest faces, to the right of the eye, and below it with its long edges running in the direction you are supposed to be looking. To the right of this solid, and touching it about the middle of the right vertical face, is another rectangular solid, $1\frac{1}{2}''$ high, and standing on its square base of $\frac{1}{4}''$ edge.

Show, by dotted lines, the invisible edges and the apparent convergence of the receding edges to a vanishing point.

9

3. Repeat the drawing in question 2, add such lines as are necessary and modify, to represent a water-trough nearly full of water and a pump with the handle towards you.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

HISTORY.

Examiners : { J. J. CRAIG, B.A.
 { J. C. MORGAN, M.A.

Values.

2+4+
6=12

1. Name an important battle in the reign of Richard III. Why was it important? Give fully the events that led to the battle.

7+5=
12

2. Sketch the events that led to the Revolution of 1688. What benefits did the English nation receive from the Revolution?

12

3. State the principal causes of the French Revolution. Show how England became involved in war with France at that time.

16

4. State the geographical position of the following places, and the chief historical event with which each is associated:—Yorktown, Cawnpore, Amiens, Austerlitz, Khartoum.

12

5. Give an account of the Reform Bill of 1867, and the Education Act of 1870.

12

6. Sketch the campaign which ended in the Conquest of Canada.

12

7. What brought about the Constitutional Act of 1791? Give its chief clauses and note any defects.

12

8. When a measure is introduced into the Dominion Parliament, name the successive stages through which it passes before it becomes a law.

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ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

BOOK-KEEPING AND PENMANSHIP.

Examiners : { J. C. MORGAN, M.A.
J. J. TILLEY.

NOTE.—*A maximum of fifteen marks will be allowed for Penmanship. This award will be based upon the character of the writing in the answers to question 4.*

Values

- | | |
|----|---|
| 6 | 1. (a) Write a short letter to Messrs. Catchem & Co., Toronto, about goods shipped to you by them, the quality being in your opinion not up to that of the sample. |
| 6 | (b) Write their reply, accepting your estimate of the value of the goods. |
| 6 | 2. (a) How can you test, in Single Entry, whether your posting is correct or not ? |
| 6 | (b) What are some of the defects of Single Entry ? |
| 14 | 3. Explain clearly the meaning of the following terms : Voucher, Assets and Liabilities, Non-negotiable Note, Days of Grace, Ad Valorem, and Commercial Paper. |
| 35 | 4. Work out the following set, using Day Book, Cash Book, Bill Book and Ledger :—

Toronto, May 1st, '95, rented a store from J. Shield @ \$20 per month and began business. At time of commencement I owed Turcotte & Co. \$21 and had \$250 in cash, mdse. worth \$345, a note at 60 days for \$73, dated Jan. 15th, '95, against J. Bell, and Tarbutt & Son owe me \$16.25 on contra account.
May 2. Sold J. Larneek, on account, 37 yards Velveteen @ \$2.25 per yard. [OVER.] |

Values

May 3. Paid Turcotte & Co., on account, \$12.75.

“ 6. Tarbutt & Son gave me an order on W. Williams to pay their account in full.

“ 7. Gave away \$5, lost \$5.

“ 8. Bought mdse. (Invoice \$237.84) from J. Macdonald & Co., paid cash \$100, and gave my note for balance. Spent \$1.35 on repairs.

“ 10. Sold Turcotte & Co. 100 barrels apples @ \$4 and groceries amounting to \$21.40.

“ 11. Paid for putting up shelves in store \$12.40, postage, etc., \$3.

“ 13. W. Williams paid by cheque on bank the order of May 6th.

6 5. (a) Write out the note in the above against J. Bell.

6 (b) Write out the order on W. Williams.

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ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

ALGEBRA AND EUCLID.

Examiners: { D. ROBB.
J. E. HODGSON, M.A.

Values.

15 1. Find the value of $x^3 + y^3 + z^3 - 3xyz$ when $x = a + 1$, $y = a - 1$, and $z = -2a$.

10 2. Combine into a simple fraction

$$\frac{x}{x^2 + 5x + 6} + \frac{15}{x^2 + 9x + 14} - \frac{12}{x^2 + 10x + 21}.$$

10 3. Show that the sum of the squares of two consecutive numbers is greater than twice their product by 1.

10 4. Solve the equation

$$\frac{x}{4} - \frac{x-4}{32} + \frac{13-2x}{40} = \frac{8-x}{2} - \frac{7}{8}.$$

5 Prove your answer.

10 5. In paying two accounts, one of which exceeded the other by one-third the less, the change out of a \$5 bill was half the difference of the accounts; find the amount of each account.

15 6. A can earn \$ p a day and B \$ q a day. If they work together, how long will it take them to earn \$ m ?

15 7. From a given point to draw a straight line equal to a given straight line.

10 Give the construction when the given point is in the given straight line.

[OVER.]

Values.

- | | |
|----|---|
| 15 | 8. Three equal straight lines, OA , OB and OC , are equally inclined to each other: if their extremities, A , B and C be joined, prove that ABC is an equilateral triangle. |
| 15 | 9. If two straight lines cut one another, the vertically opposite angles shall be equal. |
| 15 | If four straight lines meet at a point so that the opposite angles are equal, these straight lines are two and two in the same straight line. |
| 5 | 10. Give the enunciation of the 26th proposition of the First Book of Euclid. |

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ANNUAL EXAMINATIONS, 1895

PUBLIC SCHOOL LEAVING.

PHYSIOLOGY AND TEMPERANCE.

Examiners: { J. J. CRAIG, B.A.
D. ROBB.

Values

- | | |
|----|--|
| 15 | 1. (a) Give the composition of bone, and state any change that takes place therein as a person advances in age.
(b) Give the names of the bones in the upper extremities. |
| 15 | 2. (a) Tobacco is an irritant narcotic. Explain this.
(b) Define stimulant, and show that the term is correctly applied to alcohol. |
| 15 | 3. Poison enters a blood vessel of the great toe. Trace its course until it reaches the brain. |
| 15 | 4. Describe the organs of respiration and show how the blood is purified by respiration. |
| 15 | 5. Distinguish between foods and poisons, and state, with reasons, to which class alcohol belongs. |

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ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

ENGLISH POETICAL LITERATURE.

Examiners : { JOHN SEATH, B.A.
J. F. WHITE.

Values

I.

1. Explain clearly and fully the meaning of each of the following passages, indicating the context in each case :—

7+3

- (a) What, silent still? and silent all?
Ah! no :—the voices of the dead
Sound like a distant torrent's fall,
And answer, "Let one living head,
But one, arise—we come, we come!"
'Tis but the living who are dumb.

7+3

- (b) "Wretch," I cried, "thy God hath lent thee,—by these
angels he hath sent thee—
Respite, respite and Nepenthe from thy memories of
Lenore!
Quaff, Oh quaff this kind Nepenthe, and forget this lost
Lenore."

12+3

- (c) "Out in the meadows the young grass springs,
Shivering with sap," said the larks, "and we
Shoot into air with our strong young wings
Spirally up over level and lea;
Come, O Swallows, and fly with us
Now that horizons are luminous!
Evening and morning the world of light,
Spreading and kindling, is infinite!"

II.

2. So my spirit often acheth
For the melodies it lacketh
'Neath thy sway, or cannot hear
For its mortal cloaked ear.
And full thirstily it longeth
For the beauty that belongeth

To the Autumn's ripe fulfilling ;—
 Heaped orchard-baskets spilling
 'Neath the laughter-shaken trees ;
 Fields of buckwheat full of bees, 10
 Girt with ancient groves of fir
 Shod with berried juniper ;
 Beech-nuts mid their russet leaves ;
 Heavy-headed nodding sheaves ;
 Clumps of luscious blackberries ; 15
Purple-cluster'd traceries
 Of the cottage climbing vines ;
 Scarlet fruited eglantines ;
 Maple forests all aflame
 When *thy sharp-tongued legates came.* 20

Ruler with an iron hand
 O'er an intermediate land !
 Glad am I thy realm is border'd
 By the plains more richly order'd,—
 Stock'd with sweeter-glowing forms,— 25
 Where the prison'd brightness warms
 In lush crimsons through the leaves,
 And a gorgeous legend weaves.

5 (a) In a short sentence state the main thought in the poem from which the above extract has been taken.

5 (b) Explain fully the force of "so", line 1.

5 × 7 = 35 (c) Explain fully the meaning of the italicized words.

5 (d) In a short sentence express the main thought contained in lines 1-20.

10 + 5 (e) Explain fully the meaning of lines 21-28 and the connection in meaning between these lines and the preceding part of the poem.

5 (f) Describe the metre and note any metrical peculiarities.

III.

3. Abou Ben Adhem—may his tribe increase!—
 Awoke one night from a deep dream of peace,
 And saw within the moonlight in his room,
 Making it rich, and like a lily in bloom,
 An angel, writing in a book of gold. 5
 Exceeding peace had made Ben Adhem bold,
 And to the Presence in the room he said,
 "What writest thou?"—The vision raised its head.

Values

And with a look made of *all sweet accord*,
Answered, "The names of those who love the Lord." 10
"And is mine one?" said Abou. "Nay, not so,"
Replied the Angel. Abou spoke more low,
But cheerily still, and said, "I pray thee, then,
Write me as one who loves his fellow-men."
The angel wrote and vanished. The next night 15
It came again with *a great wakening light*,
And showed the names whom love of God had blest.
And lo! Ben Adhem's name led all the rest.

5 (a) State briefly the lesson the foregoing poem is intended to teach.

5×6= (b) Explain the meaning and appropriateness of the
30 italicized words.

5 (c) Why was Abou's name not in the book at first?

5 (d) What was the ground of Abou's cheerfulness in
line 13?

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ANNUAL EXAMINATIONS, 1895.

PUBLIC SCHOOL LEAVING.

READING.

Examiners: { JOHN SEATH, B.A.
 { J. E. HODGSON, M.A.

NOTE.—The Examiners are requested to pay special attention to distinctness of enunciation, and naturalness of expression; and, by asking questions, to determine whether the candidate has read intelligently or not.

Twenty-five lines at least are to be read from each of two of the following selections, one in prose and one in poetry.

SELECTIONS.

Lesson	XLVIII.	-	Metaphysics.
“	LXXVII.	-	Contentment.
“	LIX.	-	Waterloo.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

ENGLISH POETICAL LITERATURE.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

A.

The verse adorn again
Fierce War, and faithful Love,
And Truth severe, by fairy Fiction drest.
In buskin'd measures move
Pale Grief, and pleasing Pain, 5
With Horror, tyrant of the throbbing breast.
A voice, as of the cherub-choir,
Gales from blooming Eden bear;
And distant warblings lessen on my ear,
That lost in long futurity expire. 10

1. State, in a single phrase, the subject of these ten lines.
2. Explain the meaning of the first three lines.
3. Explain the connection between the original meaning of "buskin'd" and its meaning in line 4.
4. Explain "measures" in line 4.
5. Show what is meant by "pleasing Pain" in line 5.
6. What is the allusion in lines 7 and 8?

B.

Sweet Highland girl, a very shower
Of beauty is thy earthly dower!
Twice seven consenting years have shed
Their utmost bounty on thy head:
And these gray rocks; this household lawn; 5
These trees, a veil just half withdrawn;

[OVER.]

This fall of water, that doth make
 A murmur near the silent lake ;
 This little bay, a quiet road
 That holds in shelter thy abode ;
 In truth, together do ye seem
 Like something fashion'd in a dream.

10

7. "Dower" (line 2). What is the ordinary meaning of this word in prose? What is its meaning as used here?

8. Explain fully the meaning of "consenting" in line 3.

9. "Bounty" (line 4). Specify, in plain prose, what is the "bounty."

10. Wherein lies the resemblance to "something fashion'd in a dream" in line 12?

11. Quote *either* a stanza from *The Cloud*, or three consecutive stanzas of *The Isles of Greece*, or the sonnet *On Chapman's Homer*.

12. With regard to *six* of the following passages, indicate the poem in which each occurs, and the connection:—

- (a) Benignity and home-bred sense
 Ripening in perfect innocence.
- (b) The golden silence of the Greek,
 The gravest wisdom of the wise.
- (c) The poetry of earth is never dead.
- (d) Praise is deeper than the lips.
- (e) Dear, as the light that visits these sad eyes,
 Dear, as the ruddy drops that warm my heart.
- (f) The Sensual and the Dark rebel in vain,
 Slaves by their own compulsion !
- (g) All at once the color flushes
 Her sweet face from brow to chin.
- (h) In native swords, and native ranks,
 The only hope of courage dwells.

13. Tell, in your own words, the story of *Hervé Riel*, reproducing, as far as you can, the spirit of the original. *Short quotations may be introduced.*

C.

TO THE DAISY.

Bright flower, whose home is everywhere!
 A Pilgrim bold in Nature's care,
 And oft, the long year through, the heir
 Of joy or sorrow,
 Methinks that there abides in thee 5
 Some concord with humanity,
 Given to no other flower I see
 The forest thorough! *

And wherefore? Man is soon deprest;
 A thoughtless Thing who, once unblest, 10
 Does little on his memory rest
 Or on his reason;
 But Thou would'st teach him how to find
 A shelter under every wind,
 A hope for times that are unkind
 And every season. 15

WORDSWORTH.

* "Thorough" meaning "through".

14. What peculiarities of the daisy suggest this poem to the poet?

15. What, in your own words, is the moral lesson drawn by the poet?

16. Explain clearly in simple prose the meaning of line 2.

17. "And wherefore?" (line 9). Write the question in full.

18. Explain fully what you conceive to be the meaning of lines 10, 11 and 12.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

HISTORY AND GEOGRAPHY.

Examiners : { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

A.

1. Give an account of Talon's administration. What office did he hold, and under what circumstances was he appointed? What other offices in the government of French Canada were instituted at the same time, and by whom were they first filled?

2. What different treaties have been concluded during the present century (*a*) between Great Britain and the United States, in which Canada was directly interested, (*b*) between Canada and the United States? Give the chief stipulations of each.

B.

3. Under what circumstances did England pass under Norman rule? Give an account of the condition of the English people during the reign of the first Norman king.

4. Specify the main provisions of 'Magna Charta.'

5. Give some account of the troubles, of a social, political or economic nature, which disturbed Britain from 1838 to 1848.

6. Tell the story of the Crimean War, giving its causes and its consequences.

7. Give a brief account of the life, and the influence on English history, of any *two* of the following men:—Becket, Thomas Cromwell, Hampden, Robert Walpole, Milton, John Bright, Disraeli.

[OVER.]

C.

8. Explain—using diagrams—the cause of

- (a) The changes of the seasons.
- (b) The inequality of day and night.

9. At 2.30 P.M. a telegram is sent from St. Petersburg, long. 30° E., to St. John, N. B., long. 66° W. Allowing 75 minutes for transmission and delays, when will it be received at St. John?

10. Name the principal agents which modify the form of the earth's surface, and explain how each operates.

11. Give a brief account of the physical features, chief towns, climate and industries of any *one* of the following:—

- (a) British Columbia.
- (b) Nova Scotia.
- (c) Newfoundland.
- (d) Australia.
- (e) Japan.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

ARITHMETIC AND MENSURATION.

Examiners: $\left\{ \begin{array}{l} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{array} \right.$

1. (a) Find, to the nearest cent, the value of $\$100 \times (1.03)^8$.
(b) Find, within one inch, the side of a square whose area is 5 acres.
2. (a) Find, by contracted methods, the value of $(1.23456)^3 \div (.23456)$, to the fourth decimal place.
(b) Prove that an integer is divisible by 3 if the sum of its digits is divisible by 3.
3. In what proportion must two kinds of tea, which cost 50 cents and 65 cents per lb. respectively, be mixed, so that when sold at 60 cents per lb. there may be a gain of $11\frac{1}{9}\%$?
4. The discount on a note for \$3650, which matured on August 21st, and was discounted on June 24th, was \$40.60. Find the rate of discount.
5. What sum of money deposited in a bank at the end of each year for the next 3 years, will amount to the same sum as \$5000 deposited now, banks paying 4 % per annum, interest added yearly?
6. What must be the market value of 6% stock, so that after paying an income tax of 16 mills on the dollar, it may yield 5 % on the investment?
7. State the relation between the pound troy and the pound avoirdupois. What is the gain per cent. when the selling price per oz. avoirdupois is the same as the cost per oz. troy?

[OVER.]

8. The diameter of a circular plate of lead is 13 inches. From this is cut out a circular plate of radius 6 inches, and the remainder of the lead is moulded into the form of a circular plate, with one-fourth of the former thickness. Find the diameter of this plate.

9. A rectangular field whose length is $\frac{4}{3}$ of its width, contains 2 ac., 112 sq. rds. Find the length of a diagonal.

10. The length of one diagonal of a rhombus is double that of the other: the area is 16 sq. in.: find the length of each side.

(A.)

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THE HIGH SCHOOL PRIMARY.

ENGLISH COMPOSITION.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

NOTE.—*The candidate will write on ONE, and only one, of the following themes:*

1. Astrology and Alchemy.

2. A Fair.

(Any proper names that may be used must be fictitious, not real names.)

3. Confederation.

4. Oliver Cromwell.

5. French Canada.

6. Description of the Province of Ontario.

7. Queen Elizabeth.

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ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

ALGEBRA AND EUCLID.

Examiners: $\begin{cases} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{cases}$

1. Find the factor by which $x^3 + y^3$ must be multiplied to produce the product $x^5 + x^4y + x^3y^2 + x^2y^3 + xy^4 + y^5$.

2. If $a = y + z - 2x$, $b = z + x - 2y$, $c = x + y - 2z$, find the value of $b^2 + c^2 + 2bc - a^2$ in terms of x , y , and z .

3. Prove that four times the product of two consecutive integers differs from a square integer by unity.

4. Solve the equation

$$\frac{x+1}{x-1} + \frac{x+2}{x-2} = \frac{2x+6}{x-3}.$$

5. (a) Simplify the fraction

$$\frac{(2x-3y)^2 - (x-2y)^2}{3x-5y}.$$

(b) Factor $7x^2 + 8xy - 12y^2 - 16x + 28y - 15$.

6. Find the G. C. M. of

$$x^4 - 2x^2 + 3x - 2 \text{ and } x^4 - 2x^3 + 5x^2 - 4x + 3.$$

7. Four places are situated on a straight road in the order of the letters A, B, C, D. The distance from A to D is 34 miles. Three times the distance from A to B is equal to twice the distance from C to D; and one-fourth of the distance from A to B added to half the distance from C to D is three times the distance from B to C. What are the respective distances?

[OVER.]

8. If $x = 2a - 3b$, and $y = 3b - 2a$, prove $(mx + ny)^3 + (nx + my)^3 = 0$.

9. Given $(3a - x)(a - b) + 2ax = 4b(a + x)$ to find x .

10. Two triangles which have the three sides in the one respectively equal to the three sides in the other, are equal in every respect. Euc. I., 8.

11. If a side of a triangle be produced the exterior angle is greater than either of the interior opposite angles. Euc. I., 16.

12. Equal triangles upon the same side of the same base have the line joining their vertices parallel to their common base. Euc. I., 39.

13. On a given line as side construct a rectangle whose area shall be equal to that of a given triangle. Euc. I., 44.

14. Equal triangles upon opposite sides of the same base have the line joining their vertices bisected by their common base, or the base produced.

(A.)

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ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

ENGLISH GRAMMAR AND RHETORIC.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

A.

More things are wrought by prayer
Than this world dreams of. Wherefore, let thy voice
Rise like a fountain for me night and day.
For what are men better than sheep or goats
That nourish a blind life within the brain,
If, knowing God, they lift not hands of prayer
Both for themselves and those who call them friend?
For so the whole round earth is every way
Bound by gold chains about the feet of God.

1. Analyse the above extract so as to show the various clauses (principal and subordinate) of which it is composed, and their relations to one another. Especially point out clearly and fully the grammatical function of each *subordinate* clause, and indicate in each case the word or words modified by such clause.

2. Define *phrase* as used in its grammatical sense. Point out (a) the Adjectival Phrases, (b) the Adverbial Phrases in the first five lines of the extract, and show clearly their grammatical relation to the words with which they are connected in sense.

3. Show clearly the grammatical functions and relations of

“Wherefore” (line 2),

“Both” (line 7),

“fountain” (line 3),

“friend” (line 7),

“what” (line 4),

“way” (line 8).

4. Distinguish in value the clauses in the extract which are introduced by relative pronouns.

[OVER.]

5. Give the grammatical name and value of the italicised words in the following sentences. Show clearly their relation to the words with which they are connected in sense:—

- (a) Of *making* books *there* is no end.
- (b) They had kept me *waiting*.
- (c) We were all set *laughing* by his witty remarks.
- (d) I think *it* foolish *to forbid* him *to come*.
- (e) They were all glad *to hear* the news.
- (f) *Let him go feed* upon the public ways.

B.

The accession of George the First marked a change in the position of England in the European Commonwealth. From the age of the Plantagenets the country had stood apart from more than passing contact with the fortunes of the Continent. But the Revolution had forced her to join the Great Alliance of the European peoples; and shameful as were some of its incidents, the Peace of Utrecht left her the main barrier against the ambition of the House of Bourbon. And not only did the Revolution set England irrevocably among the powers of Europe, but it assigned her a special place among them. The result of the alliance and the war had been to establish what was then called a “balance of power” between the great European states; a balance which rested indeed not so much on any natural equilibrium of forces as on a compromise wrung from warring nations by the exhaustion of a great struggle; but which, once recognised and established, could be adapted and readjusted, it was hoped, to the varying political conditions of the time. Of this balance of power, as recognised and defined in the Treaty of Utrecht and its successors, England became the special guardian. The stubborn policy of the Georgian statesmen has left its mark on our policy ever since. In struggling for peace and the sanctity of treaties, even though the struggle was one of selfish interest, England took a ply which she has never wholly lost. Warlike and imperious as is her national temper, she has never been able to free herself from a sense that her business in the world is to seek peace alike for herself and for the nations about her, and that the best security for peace lies in her recognition, amidst whatever difficulties and seductions, of the force of international engagements and the sanctity of treaties.

6. (a) What is the main statement of this paragraph, and where is it found?

(b) What is the bearing of each of the first four sentences on this statement?

7. (a) Rewrite sentence 6 (“Of this . . . guardian”), substituting the natural for the inverted order; and state, giving reasons for your choice, which you consider preferable.

(b) Rewrite the last sentence, replacing the concessive clause (“Warlike . . . temper”) by a phrase, and the concessive phrase (“amidst . . . seductions”) by a clause.

8. Give three rules for Paragraph-structure, and show how far the paragraph here given complies with each.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

LATIN AUTHORS.

Examiners : { W. DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

Translate :

Ii cum ad castra venissent, nostri eruptione facta multis eorum interfectis, capto etiam nobili duce Lugotorige suos incolumes reduxerunt. Cassivellaunus hoc proelio nuntiato tot detrimentis acceptis, vastatis finibus, maxime etiam permotus defectione civitatum, legatos per Atrebatem Commium de dediti-one ad Caesarem mittit. Caesar, cum constituisset hiemare in continenti propter repentinos Galliae motus, neque multum aestatis superesset, atque id facile extrahi posse intellexeret, obsides imperat et quid in annos singulos vectigalis populo Romano Britannia penderet, constituit.

1. Give the principal parts of the verbs from which *facta*, *capto*, *permotus*, *extrahi* and *penderet* are formed.

2. Write down the nominative and genitive singular of *duce*, *finibus*, *obsides*, the positive of *maxime*, and the superlative of *facile*.

3. What is the rule for the case of *defectione*, *aestatis*, and *vectigalis*? Give the verbs from which *eruptione* and *detrimentis* are derived.

4. *Eruptione facta*. What is the literal translation? Translate, using (a) the present participle active, (b) a principal clause.

5. What does Caesar tell us about (a) the money of the ancient Britons; (b) their mines; (c) their agriculture; (d) their dress; (e) their appearance in battle? [OVER.]

B.

Translate :

Consurgitur ex consilio; comprehendunt utrumque et orant ne sua dissensione et pertinacia rem in summum periculum deducant: facilem esse rem, seu maneant, seu proficiscantur, si modo unum omnes sentiant ac probent; contra in dissensione nullam se salutem perspicere. Res disputatione ad mediam noctem perducitur. Tandem dat Cotta permotus manus; superat sententia Sabini. Pronuntiatur prima luce ituros. Consumitur vigiliis reliqua pars noctis, cum sua quisque miles circumspiceret, quid secum portare posset, quid ex instrumento hibernorum relinquere cogeretur.

6. State the mood, tense and voice, and give the principal parts of *deducant*, *maneant*, *sentiant*, *ituros*, *cogeretur*.

7. *Consurgitur*. Translate (a) literally, (b) using the active voice.

8. Give the rule for the case of *pertinacia*, *lucē*, and *vigiliis*, and for the mood of *deducant*, *esse* and *cogeretur*.

9. *Ne . . . rem in summum periculum deducant, facilem esse rem, res . . . ad mediam noctem perducitur*. Translate the above as idiomatically as you can and without using the word *thing*.

C.

Translate :

At ii, qui obsidebantur, praeterita die, qua auxilia suorum expectaverant, consumpto omni frumento, inscii quid in Aeduis gereretur, concilio coacto de exitu suarum fortunarum consultabant. Ac variis dictis sententiis, quarum pars deditiōem, pars eruptionem censebat, non praetereunda oratio Critognati videtur propter eius singularem et nefariam crudelitatem. Hic, summo natus loco et magnae habitus auctoritatis, "Nihil," inquit, "de eorum sententia dicturus sum, qui turpissimam servitutem deditiōis nomine appellant, neque hos habendos civium loco neque ad consilium adhibendos censeo."

obsideo, *besiege*;
praetereo, *pass by*;
inscius, *ignorant*;
cogo, *summon*;

censeo, *recommend*;
crudelitas, *cruelty*;
habeo, *consider*;
adhibeo, *admit*.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

FRENCH AUTHORS.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

NOTE.—*Candidates will take section A and either section B or section C.*

A.

Translate :

Et toutes ces pensées l'empêchaient de faire attention à la route qu'il suivait, et cependant il trotta toujours. Il allait pour la seconde fois baiser en imagination la blanche main de Miss Nevil, quand il pensa baiser (*all but kissed*) en réalité la tête de son cheval qui s'arrêta tout à coup. C'est que la petite Chilina lui barrait le chemin et lui saisissait la bride.

"Où allez-vous ainsi, Ors' Anton'?" disait-elle. "Ne savez-vous pas que votre ennemi est près d'ici?"

"Mon ennemi!" s'écria Orso furieux de se voir interrompu dans un moment aussi intéressant. "Où est-il?"

"Orlanduccio est près d'ici. Il vous attend. Retournez, retournez."

"Ah! il m'attend! Tu l'as vu?"

"Oui, Ors' Anton', j'étais couchée dans la fougère (*brake*) quand il a passé. Il regardait de tous les côtés avec sa lunette."

"De quel côté allait-il?"

"Il descendait par là, du côté où vous allez."

"Merci."

"Ors' Anton', ne feriez-vous pas bien d'attendre mon oncle? Il ne peut tarder, et avec lui vous seriez en sûreté."

"N'aie pas peur, Chili, je n'ai pas besoin de ton oncle."

"Si vous vouliez j'irais devant vous."

"Merci, merci."

Et Orso, poussant son cheval, se dirigea rapidement du côté que la petite fille lui avait indiqué.

[OVER.]

B.

Translate :

Quand la chèvre blanche arriva dans la montagne, ce fut un ravissement général. Jamais les vieux sapins n'avaient rien vu d'aussi joli. On la reçut comme une petite reine. Les châtaigniers se baissaient jusqu'à terre pour la caresser du bout de leurs branches. Les genêts d'or s'ouvraient sur son passage, et sentaient bon tant qu'ils pouvaient. Toute la montagne lui fit fête.

On pense bien si notre chèvre était heureuse ! Plus de corde, plus de pieu... rien qui l'empêchât de gambader, de brouter à sa guise... C'est là qu'il y en avait de l'herbe ! jusque par-dessus les cornes !... Et quelle herbe ! savoureuse, fine, dentelée, faite de milles plantes..... C'était bien autre chose que le gazon du clos. Et les fleurs donc !... De grandes campanules bleues, des digitales de pourpre à longs calices, toute une forêt de fleurs sauvages débordant de sucs capiteux !.....

La chèvre blanche, à moitié soûle, se vautrait là-dedans les jambes en l'air et roulait le long des talus, pêle-mêle avec les feuilles tombées et les châtaignes... Puis, tout à coup, elle se redressait d'un bond sur ses pattes. Hop ! la voilà partie, la tête en avant, à travers les maquis et les buissières, tantôt sur un pic, tantôt au fond d'un ravin, là-haut, en bas, partout... On aurait dit qu'il y avait dix chèvres de M. Seguin dans la montagne.

C'est qu'elle n'avait peur de rien la Blanquette.

Elle franchissait d'un saut de grands torrents qui l'éclaboussaient au passage de poussière humide et d'écume. Alors, toute ruisse-lante, elle allait s'étendre sur quelque roche plate et se faisait sécher par le soleil... Une fois, s'avancant au bord d'un plateau, une fleur de cytise aux dents, elle aperçut en bas, tout en bas dans la plaine, la maison de M. Seguin avec le clos derrière. Cela la fit rire aux larmes.

"Que c'est petit," dit-elle ; "comment ai-je pu tenir là-dedans ?"

Pauvrette ! de se voir si haut perchée, elle se croyait au moins aussi grande que le monde...

C.

Translate :

Quand j'avais dix-huit ans j'allais, durant la belle saison, passer le samedi à Versailles, ville qu'habitait ma mère. En sortant des barrières, j'étais toujours sûr de trouver un grand pauvre qui criait d'une voix glapissante : *La charité, s'il vous plaît, mon bon Monsieur !* De son côté, il était bien sûr d'entendre résonner dans son chapeau une grosse pièce de deux sous.

Un jour que je payais mon tribut à Antoine—c'était le nom de mon pensionnaire—il vint à passer un petit monsieur poudré, sec, vif, et à qui Antoine adressa son memento criard : *La charité, s'il vous plaît, mon bon Monsieur !* Le passant s'arrêta, et, après avoir considéré quelques moments le pauvre : “ Vous me paraissez,” lui dit-il, “ intelligent et en état de travailler ; pourquoi faire un si vil métier ? Je veux vous tirer de cette triste situation et vous donner dix mille francs de rente.” Antoine se mit à rire et moi aussi. “ Riez tant que vous le voudrez,” reprit le monsieur poudré, “ mais suivez mes conseils, et vous acquerrez ce que je vous promets. Je puis d'ailleurs vous prêcher d'exemple : j'ai été aussi pauvre que vous ; mais, au lieu de mendier, je me suis fait une hotte avec un mauvais panier, et je suis allé dans les villages et dans les villes de province, demander, non pas des aumônes, mais de vieux chiffons qu'on me donnait gratis et que je revendais ensuite, un bon prix, aux fabricants de papier. Au bout d'un an, je ne demandais plus pour rien les chiffons, mais je les achetais, et j'avais en outre une charrette et un âne pour faire mon petit commerce.

“ Cinq ans après, je possédais trente mille francs, et j'épousais la fille d'un fabricant de papier, qui m'associait à sa maison de commerce peu achalandée, il faut le dire ; mais j'étais jeune encore, j'étais actif, je savais travailler et m'imposer des privations. À l'heure qu'il est, je possède deux maisons à Paris, et j'ai cédé ma fabrique de papier à mon fils, à qui j'ai enseigné de bonne heure le goût du travail et de la persévérance. Faites comme moi, l'ami, et vous deviendrez riche comme moi.”

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

GERMAN AUTHORS.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.

Translate:

1. Nun waren gerade die hundert Jahre verflossen, und der Tag war gekommen, wo Dornröschen wieder erwachen sollte. Als der Königssohn sich der Hecke näherte, waren es lauter grosse schöne Blumen, die taten sich von selbst auseinander und liessen ihn unbeschädigt hindurch: und hinter ihm taten sie sich wieder als eine Hecke zusammen. Im Schlosshof sah er die Pferde und scheckigen Jagdhunde liegen und schlafen: auf dem Dache saszen die Tauben und hatten das Köpfchen unter den Flügel gesteckt. Und als er ins Haus kam, schliefen die Fliegen an der Wand, der Koch in der Küche hielt noch die Hand, als wollte er den Jungen anpacken, und die Magd sasz vor dem schwarzen Huhn, das sollte gerupft werden.

2. Einstmals sollte die Hochzeit des ältesten Königssohnes gefeiert werden, da gieng die arme Frau hinauf, stellte sich vor die Saltüre und wollte zusehen. Als nun die Lichter angezündet waren, und immer einer schöner als der andere hereintrat, und alles voll Pracht und Herrlichkeit war, da dachte sie mit betrübtem Herzen an ihr Schicksal und verwünschte ihren Stolz und Übermut, der sie erniedrigt und in so grosse Armut gestürzt hatte. Von den köstlichen Speisen, die da ein- und ausgetragen wurden, warfen ihr die Diener manchmal ein par Brocken zu, die tat sie in ihr Töpfchen und wollte sie heimtragen.

3. Hans trieb seine Kuh ruhig vor sich her und bedachte den glücklichen Handel. "Hab' ich nur ein Stück Brot, und
[OVER.]

daran wird mir's doch nicht fehlen, so kann ich, so oft mir's beliebt, Butter und Käse dazu essen: hab' ich Durst, so melk' ich meine Kuh und trinke Milch. Herz, was verlangst du mehr?" Als er zu einem Wirtshaus kam, machte er Halt, ass in der grossen Freude alles, was er bei sich hatte, sein Mittag- und Abendbrot, rein auf und liess sich für seine letzten par Heller ein halbes Glas Bier einschenken.

B.

Translate:

Mitten in einem dichten Wald steht ein Bäumlein. Es hat keine Blätter, sondern nur Nadeln; sie stechen, sobald man sie anrührt. Traurig spricht das Bäumchen: "Alle meine Kameraden sind mit so schönen Blättern bedeckt, ich allein habe nur Nadeln. Kein Mensch berührt mich, denn wer will sich gern stechen? Ach, wie sehr wünsche ich mir Blätter von lauterem Golde!"

Als es nun Nacht wird, schläft das Bäumlein ein; früh am anderen Morgen wacht es wieder auf. Und siehe da, es hat Blätter von lauterem Golde. Wie herrlich diese in der Sonne funkeln! Freudig spricht das Bäumchen: "Jetzt bin ich stolz, kein Baum im Walde hat so schöne Blätter wie ich."

Den ganzen Tag freut sich das Bäumlein über die goldene Pracht. Aber am Abend kommt ein Mensch durch den Wald. Sein grimmiges Gesicht ist von einem langen Bart eingeraht (*surrounded*), in der Hand trägt er einen grossen Sack. Der Mensch sieht die goldenen Blätter, pflückt sie alle ab und steckt sie in seinen Sack. Dann geht er eiligst fort, das arme Bäumlein aber bleibt leer zurück. Voller Schmerz spricht es: "Wie leid thut es mir, dass der Mensch meine schönen goldenen Blätter geraubt hat. Jetzt schäme ich mich noch mehr vor den anderen Bäumen; sie alle tragen grünes Laub, ich aber bin ganz kahl. Wenn ich nur Blätter von hellem Glas hätte, dann wäre ich ganz zufrieden."

Am anderen Morgen hat das Bäumlein wirklich gläserne Blätter. O, wie sie blitzen und glitzern! Das Bäumchen ist übergücklich; denn keiner von den Wald-Bäumen sieht so prächtig aus. Allein des Bäumleins Glück dauert nicht lange. Ein heftiger Sturm braust durch den Wald, er schüttelt alle Bäume und verschont auch unser Bäumlein nicht.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

PHYSICS.

Examiners: { R. R. BENSLEY, B.A.
C. A. CHANT, B.A.
A. P. KNIGHT, M.A.

NOTE.—(a) *Give diagrams whenever possible.*

(b) *Experiments are to be clearly and definitely described, and must be such as can be easily performed in an ordinary school.*

1. (a) Give two experiments which show that air exerts pressure.

(b) Give two experiments which indicate that, in ordinary water, air is in solution.

2. (a) What prominent facts regarding the transmission of sound can be demonstrated by means of an air-pump and an alarm clock? (Describe clearly the arrangement of the apparatus, and give fully the observations you would make.)

(b) Give experiments to show, (i) on what *pitch* depends; (ii) on what *loudness* depends. (Use the rotating disc.)

(c) How would you conduct experiments on a string to determine what change of pitch accompanies change of tension, and also change of length?

3. (a) You are given a concave mirror, a candle, and a measuring rod. How would you proceed to find the *radius of curvature* of the mirror?

(b) An object is placed before a concave mirror
(i) between the principal focus and the mirror,
(ii) beyond the centre of curvature.

Draw the image in the two cases (two diagrams).

(c) Draw a diagram to show how a person, by using two mirrors, can see the back of his head. [OVER.]

4. (a) By a clear figure show that a single lens may be used as a microscope.

(b) How would you produce a solar spectrum on a screen, or on the wall? Also, describe and explain the effect of interposing in the course of the light a deep red glass.

5. (a) How would you produce an electro-magnet? State the two methods of increasing the strength of the electro-magnet.

(b) Describe an incandescent electric lamp, drawing a diagram of a section down through the middle of it, and stating why each part is constructed as it is.

6. (a) You have a long coil of silk-covered fine wire, and suspect that the wire is broken somewhere. How would you test to see?

(b) A telegraph line is set up to transmit messages between two rooms in the same house. Draw a diagram of the circuit, and state what battery might be used.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

LATIN GRAMMAR AND COMPOSITION.

Examiners : { W. DALE, M.A.
 { J. FLETCHER, M.A.
 { J. C. ROBERTSON, B.A.

1. The following passage is not to be translated, but is given merely as a basis for the questions that follow:—

Caesar exposito exercitu et loco castris idoneo capto, ubi ex captivis cognovit, quo in loco hostium copiae consedissent, cohortibus decem ad mare relictis et equitibus trecentis, qui praesidio navibus essent, de tertia vigilia ad hostes contendit eo minus veritus navibus, quod in litore molli atque aperto deligatas ad ancoram relinquebat, et praesidio navibusque Quintum Atrium praefecit. Ipse noctu progressus millia passuum circiter duodecim hostium copias conspicatus est.

Translate into Latin :

- (a) While the cavalry was being landed.
- (b) When (*cum*) they learned that the army had encamped.
- (c) The shore was easy and clear.
- (d) They leave the same cohort to guard this ship.
- (e) They were hastening to the camp over which he had set Caesar himself.
- (f) On the tenth night they advance a mile.

2. Using the verbs *accipio*, *possum*, *proficiscor*, *transeo*, translate into Latin the following sentences:—

- (a) They receive.
- (b) It ought to be received.
- (c) It had been received.
- (d) We cannot set out.
- (e) He will set out.
- (f) They said (*dixerunt*) that he had set out.
- (g) He learned (*cognovit*) who had set out.

[OVER.]

- (h) He learned who could cross.
- (i) They were crossing.
- (j) He begged them (*rogavit*) to cross.
- (k) He begs us (*rogat*) to cross.
- (l) An opportunity (*facultas*) of crossing.

3. Translate into Latin:—

- (a) He uses a larger ship.
- (b) As all hope had been lost, they surrendered to him.
- (c) For two reasons they make the mound as large as possible.
- (d) All these places are farther distant.
- (e) Having reached another river, he demanded a large number of ships from the neighboring state.
- (f) They informed Caesar that the hostages which the Britons had promised to give had been sent to the nearest winterquarters.

4. State the reason for the mood or the case used in the italicised words in the following sentences (the sentences are not to be translated):—

- (a) Ille omnibus primo precibus petere contendit, ut in Gallia *relinqueretur*, partim quod insuetus navigandi mare *timeret*.
- (b) Qua re animadversa Ambiorix pronuntiari jubet ut procul tela conjiciant neu propius *accedant* et, quam in partem Romani impetum *fecerint*, cedant (*levitate armorum et cotidiana exercitatione nihil iis noceri posse*), rursus se ad signa *recipientes* insequantur.
- (c) In the preceding extract (b) why do we not have *qua in parte* for *quam in partem*, and *faciant* for *fecerint*?

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

FRENCH GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE. — *The extracts are given merely as a basis for the questions that follow, and are not to be translated.*

Au commencement du siècle dernier, un négociant français qui était aux Indes orientales, où il avait fait une grande fortune, s'embarqua pour revenir en France. Il avait avec lui sa femme et deux enfants, un garçon et une fille; le garçon, âgé de quatre ans, se nommait Jean, et la fille, qui n'en avait que 5 trois, s'appelait Marie.

* * * * *

Il avait sept ans. Tout blond, tout rose, et si vif; gai comme un passereau, le petit, il n'y avait pas trois semaines encore! ... Mais une fièvre l'avait saisi, on l'avait ramené, un soir, de l'école communale, la tête lourde et les mains très chaudes. 10 Et depuis il était là, dans ce lit.

1. Write the feminine of the following adjectives:—*dernier* (l. 1), *français* (l. 1), *blond* (l. 7), *rose* (l. 7), *vif* (l. 7), *gai* (l. 7).

2. *Se nommait* (l. 5). Write the third person plural of the following tenses of this verb: the present indicative, the imperfect indicative, the past definite, the future, the present conditional, the imperative, the present subjunctive and the imperfect subjunctive.

3. *Saisi* (l. 9.) Write in full the present of the indicative, the future, and the imperfect subjunctive of this verb.

4. Translate into French:

(a) Go on board ship.

(b) She is eleven years and a half old.

[OVER.]

B.—(Composition.)

NOTE. — *All numerals must be written in words, not in figures.*

5. Translate into French :

- (a) This little girl has five brothers and three sisters.
- (b) We had four horses, seven cows, six dogs and ten sheep.
- (c) They shall have twenty-five cents on their birthday.
- (d) We should have twelve boy-cousins and thirteen girl-cousins.
- (e) They have had only eighteen boys in the class this week.

6. Translate into French :

- (a) On the table there are bread, meat and water.
- (b) There was some good milk in the house, but we had none.
- (c) There will be no books on the tables in your room.
- (d) There would be neither sugar, pepper nor salt.
- (e) Here are my father and mother; there are yours.

7. Translate into French :

- (a) We are tired and sleepy now.
- (b) They were cold last night, but we were very warm.
- (c) Those big boys wanted to beat the little ones.
- (d) We needed something to eat. We were hungry.
- (e) They intended to go to town yesterday.

8. Translate into French :

- (a) Send for some sugar, please; we have no more.
- (b) They have but few friends; they are so bad.
- (c) If you have any more pencils, lend us some.
- (d) We shall never obey the teacher, if we do not like him.
- (e) Peaches and plums were scarce last year; we had hardly any.

9. Translate into French :

Emperor Frederic, who was emperor only a few months, was much loved by his people, because he was so kind. One day he was taking a walk, and went into a school. The school-master was weeping, and the prince asked him why he was weeping. The young man told him that his mother was dying, and that he could not go to see her because he had to be in his school. "Go and see your mother, my friend," said the prince, "and I will take your place."

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

GERMAN GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE.—*The extract is given merely as a basis for the questions which follow, and is not to be translated.*

Brüderchen nahm sein Schwesterchen an der Hand und sprach: "Seit die Mutter tot ist, haben wir keine gute Stunde mehr: die Stiefmutter schlägt uns alle Tage, und wenn wir zu ihr kommen, stöszt sie uns mit den Füßen fort. Die harten Brodkrusten, die übrig bleiben, sind unsere Speise, und dem Hündlein unter dem Tisch geht's besser: dem wirft sie doch manchmal einen guten Bissen zu. Dass Gott erbarm', wenn das unsere Mutter wüsste! Komm', wir wollen mit einander in die weite Welt gehen." Sie giengen den ganzen Tag über Wiesen, Felder und Steine, und wenn es regnete, sprach das Schwesterchen: "Gott und unsere Herzen, die weinen zusammen!" Abends kamen sie in einen groszen Wald und waren so müde von Jammer, Hunger und dem langen Weg, dass sie sich in einen hohlen Baum setzten und einschliefen.

1. Give the gender of *Füßen*, *Brodkrusten*, *Tisch*, *Felder*, *Herzen*, *Steine*.

2. Give the genitive singular and the nominative plural of *Hand*, *Mutter*, *Gott*, *Wald*, *Baum*.

3. Compare *mehr*, *hart*, *grosz*, *lang*, *hohl*.

4. Give the principal parts (infinitive, past and past participle,) of the verbs *schlägt*, *stöszt*, *wirft*, *wüsste*, *einschliefen*.

[OVER.]

5. Translate into German :

- (a) We have no good tables.
- (b) The bread is on the table.
- (c) There is nothing left.
- (d) A large black dog bit him.
- (e) The sister is falling asleep under the tree.

6. Give the German for *yesterday, the day after to-morrow, a week from to-day, to-morrow morning, every evening.*

B.—(Composition.)

7. Translate into German :

- (a) The young bear could not find his cup.
- (b) The little girl was alone all the day.
- (c) Where did you buy that pretty dress?
- (d) Two tame doves came to the window.
- (e) What did your mother say to you?

8. Translate into German :

- (a) Help me shut this door, please!
- (b) Get the book and lay it on the table.
- (c) On Wednesday I am going to Toronto, the next day to Hamilton.
- (d) It is now half-past eleven.
- (e) To-morrow your father is coming here.

9. Translate into German :

- (a) How pretty the water is!
- (b) You surely did not do that!
- (c) What am I to do with the horse?
- (d) Why couldn't your mother come to-day?
- (e) Did he know you when he saw you?

10. Translate into German :

Do you see that dog? He is running after a wolf but cannot catch him. Wolves are often too strong for dogs and kill them. The shepherd wishes to kill this wolf because he has eaten some of his lambs (*Lamm*) but the old beast is very cunning (*schlau*) and keeps out of his way. I hate wolves, but I should like to have a good big dog. Dogs are very kind to little children. Have you a dog? Your father should buy one for you.

Identify, with the help of your Text-book, the plant submitted and fill o
the accompanying schedule:

NOTE.—Candidates are requested to indicate Class, Sub-Class, and Division thus **X**. Name of Family,
Genus and Species must be written in full.

CLASS I.—GYMNOSPERMS.		
CLASS. II.—ANGIOSPERMS.		
SUB-CLASS I.—DICOTYLEDONS.		1. POLYPETALOUS DIVISION, 2. GAMOPETALOUS DIVISION, 3. APETALOUS DIVISION,
SUB-CLASS II.—MONOCOTYLEDONS.		1. SPADICEOUS DIVISION, 2. PETALOIDEOUS DIVISION, 3. GLUMACEOUS DIVISION,
Family		
Genus		
Species.		

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

BOTANY.

Examiners: { R. R. BENSLEY, B.A.
C. A. CHANT, B.A.
A. P. KNIGHT, M.A.

B.

1. (a) Give the common and botanical names of the plant submitted.

(b) Name the family to which it belongs and give the botanical names of three other genera belonging to the same family, together with their habitats and times of flowering.

2. Make drawings of the parts of the flower and of a leaf of the submitted plant, indicating in them by descriptive terms the various external structural features.

3. Describe briefly the root and the flower of the plant submitted.

4. Give a general account of the structure of leaves, and of the external modifications of form which they present.

5. Describe and compare the seeds of the bean and the Indian corn.

6. (a) Describe the structure of a pollen grain.

(b) What is meant by *pollination*? By what means is it effected?

(B.)

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

DRAWING.

Examiners: { A. C. CASSELMAN.
J. E. HODGSON, M.A.

PERSPECTIVE.

1. Give a short, clear explanation of the following terms:—
ground line, line of direction, station point, measuring point,
plan.

2. Height 5'. Distance 16'. Scale $\frac{1}{4}''=1'$.

A rectangular solid 8'x8'x3' rests on the ground on one of its 8'x3' faces, the long edges of which are perpendicular to the picture plane. Piercing this solid, centrally, from one square face to the opposite one, is a right cylinder 8' long and 3' in diameter. The middle point of the axis of the cylinder coincides with the centre of the rectangular solid. Show the rectangular solid and the cylinder in perspective, when the nearest corner of the rectangular solid on the ground is 4' to the left, and 1' beyond the picture plane.

3. A frustum of a right, square pyramid is 3' thick, each edge of the square base is 6' long and each edge of the top 4' long. Show this solid in perspective when it rests on its base on the ground so that the edges of the base make equal angles (45°) with the picture plane. The nearest angle of the base on the ground is 4' to the left and 2' beyond the picture plane.

MODEL DRAWING.

4. Draw the watering can as it appears to you. Your drawing must be not less than about SIX INCHES in its greatest dimension.

[OVER.]

MEMORY OR OBJECT DRAWING.

NOTE.—*The following drawings are to be made freehand.*

5. (a) Draw a group of the three type solids, sphere, cylinder and cube, resting on a horizontal surface below the level of the eye. Give a reason for arranging them as shown in your drawing.

(b) Draw a rectangular solid 10" x 7" x 3" as it would appear below the eye when resting on one of its 10" x 7" faces, the long edges of which recede to the right at an angle of about 40°. By means of dotted lines show the apparent convergence of the edges towards a vanishing point. The drawing is to be *one-fourth* the actual size of the solid.

(c) Repeat the drawing in (b) and add such lines as will make it represent a thick book with its back on the long, vertical face to the left.

(d) Draw a vertical cylinder, three inches long and one and one-half inches in diameter, as it would appear below the eye level. Show the invisible edges by dotted lines.

(e) Repeat the drawing in (d) and add such lines as are necessary to represent a barrel with four hoops. Show the head of the barrel. On the ground to the right of the barrel show a pail.

Education Department, Toronto.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL PRIMARY.

BOOK-KEEPING, COMMERCIAL TRANSACTIONS AND PENMANSHIP.

Examiners: { A. C. CASSELMAN.
 { JOHN SEATH, B.A.

NOTE.—*The Penmanship will be judged from the neatness and writing shown on the whole paper. All business transactions and forms are to be dated from Toronto.*

Toronto, June 17th, 1895. John Smith opens a grocery store at 1010 King St., West, Toronto, agreeing to pay rent for the place of business quarterly, in advance, at the rate of \$600 per year. He invests as follows:—

An account against W. P. Patterson of	\$ 85.75
A stock of goods as per inventory	2561.00
A note in favor of John Smith, made by Wm. Holmes on Dec. 17th, 1894, for \$800, payable in one year and bearing Interest at 10 per cent. per annum.....	840.00
One lot in Parkdale valued at	800.00
Cash	513.25

June 18th.—He opens an account at the Bank of Montreal, depositing to his credit all available funds amounting to \$513.25. He pays the first quarter's rent by issuing a check for the amount. He buys of Jones, Gowan & Co., wholesale grocers, an invoice of groceries amounting to \$1465.00, and gives his note payable in 90 days for the same.

Cash sales for the day, \$375.00.

June 19th.—He sells the Parkdale lot for \$1000.00, receiving cash \$500, purchaser's check on Molson's Bank for \$400, and 50 cwt. of best pastry flour at \$2.00 per cwt.

He buys of Jones, Gowan & Co., an invoice of goods amounting to \$536.00, on 60 days' credit.

Cash sales for the day, \$284.00.

[OVER.]

June 20th.—He deposits to his credit in the bank \$1400. He sells J. P. Wilson, on account, 1 ton of flour at \$1.60 per cwt.

He receives from W. P. Patterson to be placed, at its face value, to the credit of Patterson's account, a Note for \$50.00, made by J. H. Anderson, in favor of W. L. Tompkins or order, on June 1st, to run 60 days.

Cash sales for the day, \$251.00.

June 21st.—He deposits to his credit in the bank \$200.00.

He pays cash for 2000 circulars, \$5.00, and for water rates, \$10.00.

Messrs. Jones, Gowan & Co., offer a discount of \$50 for immediate payment of note drawn in their favor on the 18th inst. The offer is accepted and check issued to retire the note.

Cash sales for the day, \$500.00.

June 22nd.—J. P. Wilson has made an assignment. The estate pays cash 25 % or \$8.00 as payment in full of his account.

1. Journalize the above transactions, open a Ledger with the necessary accounts, post all the items, make a Trial Balance and close the Set of Books.

2. Write the Note, received on June 20th, as it appears when received by John Smith, dating it from Toronto.

3. What is a Balance Account? What do the entries in it show? How is it closed?

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

ENGLISH GRAMMAR AND RHETORIC.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

A.

The wish, that of the living whole
No life may fail beyond the grave,
Derives it not from what we have
The likest God within the soul ?

Are God and Nature then at strife 5
That Nature lends such evil dreams ?
So careful of the type she seems,
So careless of the single life ;

That I, considering everywhere 10
Her secret meaning in her deeds,
And finding that of fifty seeds
She often brings but one to bear,

I falter where I firmly trod,
And falling with my weight of cares 15
Upon the great world's altar-stairs
That slope thro' darkness up to God,

I stretch lame hands of faith, and grope
And gather dust and chaff, and call
To what I feel is Lord of all,
And faintly trust the larger hope. 20

1. Analyze the first thirteen lines of the above extract so far as to show the kinds and relationships of the several clauses therein contained.

[N.B.—If the subordinate clause is connected with some one word especially, be careful to specify that word, and the manner in which it is modified by such clause.]

[OVER.]

2. Explain clearly the grammatical functions and relations of
of

“wish” (line 1),
“likest” (line 4),
“then” (line 5),

“but” (line 12),
“to bear” (line 12),
“falling” (line 14).

3. (a) What is the grammatical distinction between a *phrase*
and a *clause*?

Show how this distinction applies to:—

- (i) “*from what we have*
The likest God within the soul” (lines 3, 4).
- (ii) “*To what I feel is Lord of all*” (line 19).
- (iii) “*But O for the touch of a vanish’d hand!*”

(b) Select, and explain the relation of, each adjectival phrase
and each adverbial phrase, in the first three stanzas of the ex-
tract.

4. “Just as prepositions have been described as transitive ad-
verbs, so conjunctions have been described as relative adverbs.”

Show clearly, by examples, what is meant by this statement.

5. In the following sentences

- (a) Consider the lilies of the field, how they grow.
- (b) It never rains but it pours.
- (c) It is to you I am putting the question.
- (d) Howsoever these things be, a long farewell to Locksley Hall.
- (e) I am sure it is so.
- (f) He has been long dead, as is well known.

(i) show the exact value and relation of each subordinate clause,
noticing any difficulties or peculiarities, and (ii) explain the
grammatical function and relation of “how” (a); “but” (b);
“Howsoever” (d); “so” (e); “as” (f).

B.

It is impossible to guess how Mr. Kipling will fare if he ventures on
one of the usual novels, of the orthodox length. Few men have succeeded
both in the *conte* (*short story*) and the novel. Mr. Bret Harte is limited to
the *conte*; M. Guy de Maupassant is probably at his best in it. Scott wrote
but three or four short tales, and only one of these is a masterpiece. Poe
never attempted a novel. Hawthorne is almost alone in his command of
both kinds. We can live only in the hope that Mr. Kipling, so skilled in
so many species of the *conte*, so vigorous in so many kinds of verse, will also
be triumphant in the novel: though it seems unlikely that its scene can
be in England, and though it is certain that a writer who so cuts to the

quick will not be happy with the novel's almost inevitable "padding." Mr. Kipling's longest effort, "The Light which Failed," can, perhaps, hardly be considered a test or touchstone of his powers as a novelist. The central interest is not powerful enough; the characters are not so sympathetic, as are the interest and the characters of his short pieces. Many of these persons we have met so often that they are not mere passing acquaintances, but already find in us the loyalty due to old friends.

6. (a) Name the sentences where there is no special word to indicate connection, and, in each case, justify the omission.

(b) Improve the last sentence of the extract as to clearness of reference.

7. (a) In the 7th sentence ("We can live inevitable 'padding.'") what is the relation in thought of the two parts separated by the colon?

(b) Rewrite the sentence as two sentences.

(c) Criticise the structure of the 9th sentence ("The central interest his short pieces.") and show how it may be improved.

8. Write notes on the following sentences as to the order of words, phrases and clauses; where necessary, improve the order, giving reasons for any changes made:—

(a) Misty, therefore, the poet has our kind permission sometimes to be; but muddy, never!

(b) We can live only in the hope that he will also be triumphant in the novel.

(c) Me he restored unto mine office, and him he hanged.

(d) Though some of the European rulers may be females, when spoken of altogether, they may be correctly classified as kings.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

HISTORY AND GEOGRAPHY.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

A.—ENGLISH AND CANADIAN HISTORY.

1. Give a brief account of the reign of William III., so far as it may be described under the following heads:—

- (a) The attitude of the various religious bodies towards the Crown, in England, Scotland and Ireland.
- (b) The Civil War in Ireland.
- (c) The National Debt.
- (d) The Bank of England.
- (e) Rise of Party Government.
- (f) Foreign Politics.
- (g) Personal Character of the King.

2. Give some account of the political situation and of the events in the reign of George III. bearing on the development of the freedom of the Press and the increase of its influence. Mention any legislation or other parliamentary action during the period (1688—1815), concerned with liberty of publication. What hindered the progress of the Press under the first two Georges?

3. Tell what you know of the younger Pitt's schemes of (a) financial, (b) constitutional reform. To what extent were they successfully carried out?

4. Describe, as clearly and as fully as possible, the causes leading to the Revolutionary War which resulted in the independence of America. What part did Canada play in that struggle?

[OVER.]

5. Name, and, by means of a map, give the position of the American Colonies which declared their independence in 1776.

B.—ANCIENT HISTORY.

6. State the causes (immediate and remote) of the Peloponnesian War, and give a concise account of that struggle from the destruction of the Athenian armament at Syracuse to the downfall of Athens.

7. Outline briefly the struggle at Rome between the Patricians and the Plebeians from its commencement down to the passing of the Licinian Rogations. Describe the legislation embodied in those statutes.

8. "The allies of the Athenians, in the Peloponnesian War, were Chios, Lesbos, Plataeae, the Messenians at Naupactus, the greater part of Acarnania, Zacynthus and Corcyra."

What and where was each of the places mentioned in this sentence?

9. Name and give the situation of the various countries and provinces which constituted the Roman Empire at the death of Augustus. As far as possible, give both ancient and modern names.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

ARITHMETIC AND MENSURATION.

Examiners: $\left\{ \begin{array}{l} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{array} \right.$

NOTE.—*Candidates for Junior Matriculation will take sections A and B ; candidates for the Junior Leaving Examination will take sections B and C.*

A.

1. Find the interest on \$1745.60, from Feb. 11th, 1894, to Jan. 2nd, 1895, at $6\frac{3}{8}$ per cent. per annum.
2. For what sum must a 60-day note be drawn, so that if discounted immediately at a bank at 5 per cent. per annum, it will yield \$289.48?
3. A can do a certain piece of work in 8 days, working 10 hours a day ; B can do the same work in 9 days, working 9 hours a day. They work together and finish the work in 4 days. How many hours a day did they work?
4. How much 5 per cent. stock must I sell at 90, if my yearly income is increased by \$20 by investing the proceeds in 6 per cent. stock at 102?

B.

5. (a) Find, to the nearest cent, the compound interest on \$1000 for 4 years at 4 % per annum.
(b) Find, within one one-hundredth of an inch, the radius of a sphere whose volume is one cubic foot. $[\pi=3.14159]$.

[OVER.]

6. Show that the G. C. M. of several fractions in their lowest terms is the fraction formed by dividing the G.C.M. of the numerators by the L.C.M. of the denominators.

7. An integer of four digits has its first and last digits interchanged. Show that the difference between this number and the original number is a multiple of 37.

8. If a sum of money doubles itself in 10 years at a certain rate of interest (compounded yearly), what is the amount of \$500 in 30 years at the same rate?

9. The areas of the three unequal faces of a rectangular solid are 383.76 sq. in., 720.72 sq. in., and 284.13 sq. in., respectively. Find the lengths of its edges.

10. A mortgage of \$6000, paying 6 % interest yearly, is to be paid off at the end of two years. What is its present value, banks paying 4 % per annum, compounded yearly, on deposits.

C.

11. How much was due on the following note on July 1st, 1887?

\$700.

Toronto, Aug. 11th, 1884.

For value received, I promise to pay John Jones, or order, Seven Hundred Dollars, with interest from date at 5 per cent.

THOMAS TATHEM.

The following payments were indorsed on this note:

Mar. 18th, 1885, \$75.

Dec. 24th, 1885, \$10.

July 31st, 1886, \$200.

12. Compare the areas of the two segments of a circle made by a chord equal to the radius.

13. Two spheres of lead, each of radius 3 inches, are moulded into a right circular cone, whose height is equal to its radius. Find the height of the cone.

14. The cost of enclosing a circular field of 10 acres by a fence is \$30. Find the cost of enclosing a circular field of $22\frac{1}{2}$ acres by a similar fence.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

PHYSICS.

Examiners: $\left\{ \begin{array}{l} \text{R. R. BENSLEY, B.A.} \\ \text{C. A. CHANT, B.A.} \\ \text{A. P. KNIGHT, M.A.} \end{array} \right.$

NOTE.—(a) *Give diagrams whenever possible.*

(b) *Experiments are to be clearly and definitely described, and must be such as can be easily performed in an ordinary school.*

1. A bullet of mass 50 grams is shot vertically upward with a velocity of 200 metres per second. Taking the acceleration of gravity in the centimetre-gram-second system to be 980 and neglecting the resistance of the air, find

- (a) how long it takes to reach the highest point;
- (b) its (potential) energy at the highest point, and also its (kinetic) energy on reaching the ground again;
- (c) its momentum 2 seconds after leaving the gun.

Give the units in each case.

2. (a) Show how a wind-mill, used for pumping purposes, transforms energy of one kind into another.

(b) A uniform beam is 4 feet long and weighs 8 pounds. It lies on a horizontal table, 1 foot projecting over the edge. How great a weight can be placed on the outer end before the other end, upon which a 5-pound weight is placed, will leave the table?

3. A rectangular vessel has the following dimensions: 5 centimetres wide, 10 centimetres long, and 20 centimetres deep. It is filled with sulphuric acid whose specific gravity is 1.8. Find the total pressure on the bottom, and on each of the four sides.

[OVER.]

4. (a) A mass of iron, weighing 15 kilograms and having a specific gravity 7.5, is attached to a string and suspended in the water. Find the tension on the string.

(b) How would you find the specific gravity

(i) of a piece of lead;

(ii) of some turpentine?

5. (a) State Charles's Law, and also Boyle's (or Marriotte's) Law.

(b) A quantity of gas, measured at 10°C . and 750mm., is 500c.c.; find the volume at 0°C . and 760mm.

6. (a) Explain briefly a simple method for finding the specific heat of iron. State where the method is defective and also how it could be improved.

(b) Explain why in a cold room iron or stone appears much colder to the hand than the woollen carpet.

(c) How would you show that water is a poor conductor of heat?

7. (a) Explain the terms *ohm*, *volt*, *ampere*, and indicate approximately their values by reference to ordinary pieces of apparatus.

(b) The resistances of iron and copper, relative to silver, are 6.46 and 1.06, respectively. The resistance of 700 feet of No. 24 copper wire is 20 ohms; find the resistance of a mile of iron wire No. 18, whose diameter is twice that of the copper wire. (Answer to three decimal places.)

8. You have four gravity cells, each of E.M.F. 1.1 volts and internal resistance 3 ohms, and you wish to send a current through a coil whose resistance is 4 ohms. Show, by diagrams, the three ways of connecting the four cells, and estimate the current in each case.

9. Draw a diagram of a telephone circuit connecting two places a considerable distance apart, and explain definitely the action of the receiver and the transmitter.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

ALGEBRA.

Examiners: $\begin{cases} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{cases}$

NOTE.—*Candidates for Junior Matriculation will take sections A and B; candidates for the Junior Leaving Examination will take sections B and C.*

A.

1. Divide $x^5 - 2x^4 - 4x^3 + 13x^2 - 11x - 7$ by $x^3 - 3x + 7$, and determine what values of x will cause the quotient to vanish.

2. Given $\frac{a+3x}{4a} - \frac{7a-5x}{6b} + 3 - \frac{9x}{4} = \frac{x}{ab} + \frac{5x}{6b}$, to find x .

3. Show, without performing the work of division, that $(3x^2 - 4x + 2)^2 - (2x^2 + 9x + 3)^2$ is exactly divisible by $x^2 + x + 1$.

4. If $x + y + z - xyz = 2$, prove that $(1-x)^2 = (1-xy)(1-xz)$.

B.

5. If $\frac{ad-bc}{a-b-c+d} = \frac{ac-bd}{a-b+c-d}$, show that each fraction equals $\frac{a+b+c+d}{4}$, and that $a+b=c+d$.

6. Solve $x^2 + y^2 - x - y = 78$.
 $xy + x + y = 39$.

[OVER.]

7. If $x = -1 + 2\sqrt{-1}$, find the numerical value of $x^4 - 12x$, giving the work in full

8. The diagonal of a rectangle is 65 inches; if the rectangle were 3 inches shorter and 9 inches wider, the diagonal would be 65 inches. Find the area of the rectangle.

9. (a) Find the square root of $25 - 4\sqrt{21}$;

(b) Simplify $\frac{\sqrt{6} + \sqrt{3} - \sqrt{2} - 2}{\sqrt{3} - \sqrt{2}}$ by rationalising the denominator.

10. Factor

(a) $8a^3 - b^3 + c^3 + 6abc$.

(b) $1 - \left(\frac{a^2 + b^2 - c^2}{2ab} \right)^2$.

11. If m and n are the roots of $ax^2 + b^2x + c^3 = 0$, and p and q are the roots of $cz^2 + b^2z + a^3 = 0$; show that

$$\frac{m+n}{p+q} = \left(\frac{mn}{pq} \right)^{\frac{1}{4}}.$$

12. A number consisting of two digits is so altered by interchanging its digits that its first value is to its second as n to m ; show that the digits themselves are as $10n - m$ to $10m - n$.

C.

13. If $ax + by = x + y + xy = x^2 + y^2 - 1 = 0$; show that

$$\frac{1}{a^2} + \frac{1}{b^2} = \frac{1}{(a-b)^2}.$$

14. To complete a certain work, A requires m times as many days as B and C together; B requires n times as many as A and C together; and C requires p times as many as A and B together; show that $\frac{1}{m+1} + \frac{1}{n+1} + \frac{1}{p+1} = 1$.

15. If $x^2 - 3x = a$, and $x^2 - 4x = 5$ have a common root; show that $a^2 - 14a + 40 = 0$.

16. If $a + c$ have to $b + c$ the ratio of a^2 to b^2 , prove that $a - b = 0$ or $bc + ac + ab = 0$.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

CHEMISTRY.

Examiners : $\left\{ \begin{array}{l} \text{R. R. BENSLEY, B.A.} \\ \text{C. A. CHANT, B.A.} \\ \text{A. P. KNIGHT, M.A.} \end{array} \right.$

1. Describe how you would separate alum from a mixture of powdered alum and blue vitriol.

2. (a) Compare the action of hot iron on steam with the action of sodium on warm water. Give equations.

(b) Define *chemical equivalent* and show how your definition applies to the two foregoing reactions.

3. Describe experiments to show how you would distinguish between finely powdered charcoal and manganese dioxide; between a jar of carbon monoxide and one of hydrogen; between a jar of hydrochloric acid gas and one of sulphur dioxide.

4. The average composition of coal gas is: hydrogen 45 %; methane 35 %; carbon monoxide 7 %; olefiant gas 4 %; butylene (C_4H_8) 2.4 %; sulphuretted hydrogen 0.3 %; nitrogen 2.5%; carbon dioxide 3.8%. What volume will the products of the combustion of 100 litres of such a gas occupy at 20°C and 750 mm. pressure?

5. Explain, using equations, what changes take place in the following experiments :—

(a) Dry sulphuretted hydrogen is passed over iron filings in a glass tube.

(b) Sulphur dioxide is passed into a vessel containing nitrogen peroxide.

(c) Carbon dioxide is passed over ignited sodium.

[OVER.]

6. Ferrous sulphide (FeS) is heated strongly in a hard glass tube open at both ends. Express the reaction which takes place by an equation.

7. The percentage composition of a gas is nitrogen 46.67, oxygen 53.33. Its vapor density ($H=1$) is 15. Calculate the formula of the gas.

8. (a) When 50 c.c. of hydrogen and 30 c.c. of chlorine are exploded in a eudiometer, what are the volume and the composition of the resulting gas at standard temperature and pressure?

(b) 50 c.c. of hydrochloric acid gas are placed in a eudiometer over mercury; some sodium amalgam is then introduced and the lower end of the tube is firmly closed with the finger and the whole inverted a number of times so that the gas may come freely into contact with the amalgam. The tube is again inverted over mercury and the volume measured. What changes have taken place? Explain.

(c) Show the relation of these experiments to the statement that "hydrogen is represented by the symbol H_2 ."

9. Sketch the chemistry of iodine.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

EUCLID.

Examiners: { A. R. BAIN, LL.D.
N. F. DUPUIS, M.A.
A. C. MCKAY, B.A.

1. Draw a perpendicular to a given line from a point not on the line. Euc. I., 12.

2. Two triangles which have two angles of the one respectively equal to two angles of the other, and a side, similarly placed with respect to equal angles in each, equal, are equal in every respect, or congruent. Euc. I., 26.

3. If a straight line be divided into two parts, the square on the whole line is equal to the sum of the squares on the parts and twice the rectangle contained by the parts. Euc. II., 4.

4. The square on the longest side of an obtuse-angled triangle exceeds the sum of the squares on the other two sides, by twice the rectangle contained by one of these sides and the part intercepted between the obtuse vertex and the foot of the perpendicular from the other vertex to this side. Euc. II., 12.

5. The perpendicular to a diameter of a circle at its extremity touches the circle at that point, and any other line drawn through this point cuts the circle. Euc. III., 16.

6. The angles between a tangent to a circle and a chord to its point of contact are equal to those in the opposite segments into which the chord divides the circle. Euc. III., 32.

7. From question 1 show either that a straight line meets a circle in two points only, or that more than one perpendicular can be drawn from a given point to a given line.

[OVER.]

8. Under what conditions are two triangles equal in every respect, when they have two sides respectively equal, and one angle, opposite an equal side in each, equal?

9. If a line be divided into three parts, the square upon the whole line is equal to the sum of the squares on the parts and twice the sum of the rectangles contained by the parts taken two and two. (This must be proved geometrically).

10. (a) Show that a circle may be drawn through three arbitrary points and no more.

(b) Explain why a circle cannot be made to touch two given lines at two arbitrary points, one in each line.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

ENGLISH COMPOSITION.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

NOTE.—*The candidate will write on ONE, and only one, of the following themes:*

1. Queen Elizabeth.
2. Astrology and Alchemy.
3. Cowper, the Poet of Country Life.
4. Confederation.
5. French Canada.
6. Examinations.

[NOTE.—Any proper names the candidate uses must be fictitious, not real names.]

7. A Description:

[Illustrating the lines

“Now fades the glittering landscape on the sight,
And all the air a solemn stillness holds.”]

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

ENGLISH POETICAL LITERATURE.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

NOTE.—*Candidates for Matriculation will take sections A and B. Candidates for the Junior Leaving will take sections B and C.*

A.

So many minds did gird their orbs with beams,
Tho' one did fling the fire.
Heaven flow'd upon the soul in many dreams
Of high desire.

Thus truth was multiplied on truth, the world 5
Like one great garden show'd,
And thro' the wreaths of floating dark upcurl'd
Rare sunrise flow'd.

And Freedom rear'd in that august sunrise 10
Her beautiful bold brow,
When rites and forms before his burning eyes
Melted like snow.

There was no blood upon her maiden robes
Sunn'd by those orient skies ;
But round about the circles of the globes 15
Of her keen eyes

And in her raiment's hem was trac'd in flame
WISDOM, a name to shake
All evil dreams of power—a sacred name.
And when she spake, 20

Her words did gather thunder as they ran,
And as the lightning to the thunder
Which follows it, riving the spirit of man,
Making earth wonder,

[OVER.]

So was their meaning to her words. No sword
Of wrath her right arm whirl'd
But one poor poet's scroll, and with *his* word
She shook the world.

25

1. Within the compass of twelve lines of manuscript give, in simple, prosaic language, a consecutive abstract of the thought conveyed in the passage quoted.

2. Express, fully but concisely, in plain prose, the substantial meaning conveyed by each of the following passages:—lines 1 and 2, lines 9 to 12, and from “No sword” (line 25) to end.

B.

3. (a) Give an outline of *The Holy Grail*, about a page of manuscript in length.

(b) In a sentence or two, state the symbolic, or allegorical significance of the same poem.

4. Quote *either* some 20 consecutive lines of *The Lotos Eaters*, or of *Morte D'Arthur*, or three consecutive stanzas of *The Day Dream*.

5. Indicate in what connection any *four* of the following passages appear:—

- (a) Let us alone. Time driveth onward fast,
And in a little while our lips are dumb.
- (b) For we are ancients of the Earth,
And in the Morning of the Times.
- (c) God make thee good as thou art beautiful.
- (d) Why should we only toil, the roof and crown of things?
- (e) The old order changeth, yielding place to new,
And God fulfils himself in many ways.
- (f) And on a sudden, lo! the level lake
And the long glories of the winter moon.

6. Explain the words in italics in the following:—

- (a) Beneath a world old yew tree, darkening half
The cloisters, on a gustful April morn
That puff'd the swaying branches into smoke.
- (b) Knights that in twelve great battles splash'd and dyed
The Strong White Horse in his own heathen blood.

- (c) *Perhaps like him of Cana in Holy Writ,
Our Arthur kept his best until the last.*
- (d) *Engarlanded and diaper'd
With inwrought flowers.*
- (e) *Little breezes dusk and shiver.*
- (f) *Those
Who dabbling in the fount of fictive tears,
And nursed by mealy-mouth'd philanthropies,
Divorce the Feeling from her mate the Deed.*

C.

In full-blown dignity see Wolsey stand,
Law in his voice and fortune in his hand :
To him the church, the realm, their pow'rs consign,
Thro' him the rays of regal bounty shine,
Turn'd by his nod the stream of honour flows, 5
His smile alone security bestows :
Still to new heights his restless wishes tow'r,
Claim leads to claim, and pow'r advances pow'r ;
Till conquest unresisted ceas'd to please,
And rights submitted left him none to seize. 10
At length his sovereign frowns ;—the train of state
Mark the keen glance and watch the sign to hate.
Where-e'er he turns he meets a stranger's eye ;
His suppliants scorn him, and his followers fly :
Now drops at once the pride of awful state, 15
The golden canopy, the glitt'ring plate,
The regal palace, the luxurious board,
The liv'ried army, and the menial lord.
With age, with cares, with maladies oppress'd,
He seeks the refuge of monastic rest. 20
Grief aids disease, remember'd folly stings,
And his last sighs reproach the faith of kings.

7. Within the compass of half a dozen lines of manuscript give a consecutive abstract of the thought conveyed in passage C.

8. Express, fully but concisely, in plain prose, the substantial meaning of each of the following passages :—line 2, line 4, line 6, line 8, line 13, lines 21-22.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

FRENCH AUTHORS.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.

1. Translate :

Au même instant ils entendirent du bruit sous le vestibule ; la porte de la grande salle s'ouvrit brusquement, et l'agent mis en faction par Tricamp entra, poussant devant lui Christiane qui paraissait plus surprise qu'effrayée!...

“Monsieur Tricamp, dit l'agent, c'est une jeunesse qui allait sortir, et que j'ai arrêtée comme elle tirait les verrous.”

Christiane les regardait tous avec un étonnement si naturel, que tout le monde y eût été pris..., sauf pourtant M. Tricamp...

“Mais enfin, qu'est-ce que vous me voulez? dit-elle à l'agent qui fermait la porte derrière elle... — Monsieur Balthazar, dites-lui donc qui je suis!

-- D'où viens-tu? dit Balthazar.

— De là-haut, répondit-elle. Gudule a peur du tonnerre; comme il grondait encore quand elle est montée se coucher, elle m'a priée de lui tenir compagnie, et j'ai dormi dans sa chambre, sur un fauteuil. Je me suis réveillée, j'ai vu le beau temps revenu, je suis descendue pour me mettre au lit; et j'allais m'assurer que vous n'aviez pas oublié de tirer les verrous, lorsque ce monsieur m'a arrêtée... Et il m'a fait joliment peur!...

2. Translate:

Ce fut encore un mauvais tour de ma moitié.—Effrayée par la voix d'un pauvre qui demanda tout à coup l'aumône à ma porte et par les aboiements de Rosine, elle fit tourner brusquement mon fauteuil, avant que mon âme eût le temps de l'avertir qu'il manquait une brique derrière; l'impulsion fut si violente que ma chaise de poste se trouva absolument hors de son centre de gravité et se renversa sur moi.

[OVER.]

Voici, je l'avoue, une des occasions où j'ai eu le plus à me plaindre de mon âme; car au lieu d'être fâchée de l'absence qu'elle venait de faire et de tancer sa compagne sur sa précipitation, elle s'oublia au point de partager le ressentiment le plus animal et de maltraiter, de paroles, ce pauvre innocent.—Fainéant! allez travailler, lui dit-elle. (Apostrophe exécration, inventée par l'avare et cruelle richesse!) “Monsieur, dit-il alors pour m'attendrir, je suis de Chambéry.—Tant pis pour vous!—Je suis Jacques: c'est moi que vous avez vu à la campagne; c'est moi qui menais les moutons aux champs.—Que venez-vous faire ici?” Mon âme commençait à se repentir de la brutalité de mes premières paroles.—Je crois même qu'elle s'en était repentie un instant avant de les laisser échapper. C'est ainsi que lorsqu'on rencontre inopinément dans sa course un fossé ou un borbier, on le voit, mais on n'a plus le temps de l'éviter.

B.

Translate :

Le bœuf ne convient pas autant que le cheval, l'âne, le chameau, etc., pour porter des fardeaux; la forme de son dos et de ses reins le démontre: mais la grosseur de son cou et la largeur de ses épaules indiquent assez qu'il est propre à tirer et à porter le joug: c'est aussi de cette manière qu'il tire le plus avantageusement; et il est singulier que cet usage ne soit pas général, et que dans des provinces entières on l'oblige à tirer par les cornes: la seule raison qu'on ait pu m'en donner, c'est que quand il est attelé par les cornes, on le conduit plus aisément; il a la tête très forte, et il ne laisse pas de tirer assez bien de cette façon, mais avec beaucoup moins d'avantage que quand il tire par les épaules: il semble avoir été fait pour la charrue; la masse de son corps, la lenteur de ses mouvements, le peu de hauteur de ses jambes, tout, jusqu'à sa tranquillité et à sa patience dans le travail, semble concourir à le rendre propre à la culture des champs, et plus capable qu'aucun autre de vaincre la résistance constante et toujours nouvelle que la terre oppose à ses efforts: le cheval, quoique peut-être aussi fort que le bœuf, est moins propre à cet ouvrage; il est trop élevé sur ses jambes, ses mouvements sont trop grands, trop brusques; et d'ailleurs il s'impatiente et se rebute (*is discouraged*) trop aisément: on lui ôte même toute la légèreté, toute la souplesse de ses mouvements, toute la grâce de son attitude et de sa démarche, lorsqu'on le réduit à ce travail pesant, pour lequel il faut plus de constance que d'ardeur, plus de masse que de vitesse, et plus de poids que de ressort (*elasticity*).

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

FRENCH GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE.—*The extract is given merely as a basis for the questions that follow, and is not to be translated.*

Qu'on n'aille pas croire qu'au lieu de tenir ma parole en donnant la description de mon voyage autour de ma chambre, je bats la campagne pour me tirer d'affaire : on se tromperait fort, car mon voyage continue réellement ; et pendant que mon âme, se repliant sur elle-même, parcourait, dans le cha- 5
pitre précédent, les détours tortueux de la métaphysique, — j'étais dans mon fauteuil, sur lequel je m'étais renversé, de manière que ses deux pieds antérieurs étaient élevés à deux
pouces de terre ; et, tout en me balançant à droite et à gauche, et gagnant du terrain, j'étais insensiblement parvenu 10
tout près de la muraille. — C'est la manière dont je voyage lorsque je ne suis pas pressé. — Là ma main s'était emparée machinalement du portrait de madame de *Hautcastel*, et l'autre s'amusait à ôter la poussière qui le couvrait. — Cette
occupation lui donnait un plaisir tranquille, et ce plaisir se 15
faisait sentir à mon âme, quoiqu'elle fût perdue dans les vastes plaines du ciel.

1. From examples occurring in the extract, deduce rules for the use of *être* as an auxiliary verb.

2. Write the third persons singular and plural of the present indicative of *aille* (line 1), *tenir* (line 1), *bats* (line 3), *élevés* (line 8), *couvrait* (line 14), *faisait* (line 16), *sentir* (line 16), *perdue* (line 16). [OVER.]

3. Write the third person singular future indicative of *aille* (line 1), *tirer* (line 3), *parcourait* (line 5), *parvenu* (line 10), *couvrait* (line 14), *faisait* (line 16), *fût* (line 16), *perdue* (line 16).

4. Point out peculiarities of conjugation in the verbs *balancer*, *voyager*. Give one example for each verb.

5. Translate, *using the second person singular* :

(a) Do not make a mistake.

(b) Amuse yourself.

6. *sur lequel* (line 7). When is *lequel* used as a relative, and when *que*?

7. *à droite et à gauche* (lines 9, 10). Account for the gender of the words *droite* and *gauche*.

B.—(Composition.)

NOTE.—*Numerals must be written in words, not in figures.*

8. Translate into French :

(a) You will be hungry before noon, will you not?

(b) He will not be sleepy before half past nine, will he?

(c) They wanted to go to town at twenty-five minutes after ten in the morning.

(d) He does not intend to go to bed till a quarter to eleven.

(e) Tell me whether he is right or wrong in going away.

9. Translate into French :

(a) What a boy! He is always doing what he ought not to do.

(b) What a pretty song! I have heard it only once.

(c) Who is that lady yonder? We have not seen her before.

(d) What are you looking for? For the horses we have lost.

(e) What are you thinking of? Of something nice.

10. Translate into French :

(a) Send me a pair of shoes from town, please.

(b) We shall send you some as soon as we can buy them.

(c) Send for some cold water, or tea and coffee; we are thirsty.

(d) I have already sent the servant for some.

(e) We shall go and get meat for your mother at the market.

11. Translate into French :

- (a) Three generals were killed in 1115.
- (b) He had his house built in 1566.
- (c) The old church was burned in 1784.
- (d) The new building had to be finished in the spring of 1893.
- (e) Queen Victoria was born May 24th, 1819, and is now seventy-six years old.

12. Translate into French :

It is said that a certain professor in Edinburgh wished to marry Christopher North's daughter. He had not courage enough to ask the father to consent to the marriage, and he therefore sent the young lady to ask him for his consent. This she did. When the father had found out that she was willing to marry the professor, he wrote a few words on a piece of paper, fastened it to her dress, and told her to tell the professor that his answer was on her back. When the professor heard this, he looked at the young lady's back, and read there the following words: "With the author's compliments" (*hommages*).

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

LATIN AUTHORS.

Examiners: { W. DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

Translate :

Ex his omnibus judicat rebus, quanto cum periculo et quanta cum virtute res sint administratae: Ciceronem pro ejus merito legionemque collaudat; centuriones singillatim tribunosque militum appellat, quorum egregiam fuisse virtutem testimonio Ciceronis cognoverat. De casu Sabini et Cottae certius ex captivis cognoscit. Postero die contione habita rem gestam proponit, milites consolatur et confirmat: quod detrimentum culpa et temeritate legati sit acceptum, hoc aequiore animo ferendum docet, quod, beneficio deorum immortalium et virtute eorum expiato incommodo, neque hostibus diutina laetatio neque ipsis longior dolor relinquatur.

1. Explain the mood of *sint administratae*, *ferendum*, *relinquatur*, and the case of *hoc* and *animo*.

2. (a) *His omnibus rebus*, *legati*, *ipsis*. Who or what is meant?

(b) What would *eorum* become if the passage were turned into the direct form?

3. Mark the quantity of the vowels enclosed in brackets:—*l(e)gionem*, *egr(e)giam*, *capt(i)vis*, *cons(o)latur*, *l(e)gati*, *diut(i)na*, *d(o)lor*.

4. Draw a map of Gaul, showing the position of the three winter-camps attacked and of the tribes that attacked them.

[OVER.]

B.

Translate :

Multum cum in omnibus rebus, tum in re militari potest fortuna. Nam sicut magno accidit casu, ut in ipsum incautum etiam atque imparatum incideret, priusque ejus adventus ab omnibus videretur, quam fama ac nuntius afferretur, sic magnae fuit fortunae, omni militari instrumento, quod circum se habebat, erepto, redis equisque comprehensis, ipsum effugere mortem. Sed hoc quoque factum est, quod aedificio circumdato silva, ut sunt fere domicilia Gallorum, qui vitandi aestus causa plerumque silvarum ac fluminum petunt propinquitates, comites familiaresque ejus angusto in loco paulisper equitum nostrorum vim sustinuerunt.

5. Give the tense, mood and voice, the principal parts, and explain the syntax of: *incideret, afferretur, erepto, effugere, vitandi*.

6. What does Caesar tell us of (a) the difference in origin and customs between the Britons of the coast and the interior, (b) the holding of land among the Germans?

C.

Translate :

- (a) In somnis, ecce, ante oculos maestissimus Hector
 Visus adesse mihi, largosque effundere fletus;
 Raptatus bigis, ut quondam, aterque cruento
 Pulvere, perque pedes trajectus lora tumentes.
 Hei mihi, qualis erat! quantum mutatus ab illo
 Hectore, qui redit exuvias indutus Achilli,
 Vel Danaum Phrygios jaculatus puppibus ignes!
- (b) Mene efferre pedem, genitor, te posse relicto
 Sperasti? tantumque nefas patrio excidit ore?
 Si nihil ex tanta Superis placet urbe relinqui,
 Et sedet hoc animo, perituraeque addere Trojae
 Teque tuosque juvat, patet isti janua leto;
 Jamque aderit multo Priami de sanguine Pyrrhus,
 Natum ante ora patris, patrem qui obtruncat ad aras.

7. Give the nominative and genitive singular and the gender of: *pulvere, pedes* (in a), *ore, sanguine* (in b).

8. Explain the case construction of *lora* and *puppibus*, and the tense of *redit* (in a).

9. Scan the fourth and the last line of extract (b).

10. Explain the references in *raptatus bigis* and *redit exuvias indutus Achilli* in extract (a), and the last line of extract (b).

D.

Translate :

Pompeius, qui castra in colle habebat, ad infimas radices montis aciem instruebat, semper, ut videbatur, exspectans, si iniquis locis Caesar se subjiceret. Caesar nulla ratione ad pugnam elici posse Pompeium existimans, hanc sibi commodissimam belli rationem judicavit, uti castra ex eo loco moveret et insolitum ad laborem Pompei exercitum cotidianis itineribus defatigaret. His constitutis rebus, signo jam profectionis dato animadversum est extra cotidianam consuetudinem longius a vallo esse aciem Pompei progressam, ut non iniquo loco posse dimicari videretur. Tunc Caesar apud suos, 'Differendum est,' inquit, 'iter in praesentia nobis et de proelio cogitandum. Animo simus ad dimicandum parati: non facile occasionem postea reperiemus ;' confestimque expeditas copias educit.

radix - - - root, spur.
subjicio - - - expose.
insolitus - - - unaccustomed.

signum - - - signal.
differo - - - put off.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND
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LATIN GRAMMAR AND COMPOSITION.

Examiners : { W. DALE, M.A.
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J. C. ROBERTSON, B.A.

1. Write the Latin for *greatest; best; greatly; certain things; at midday; as easily as possible; that it might be taken; that it might be done; he will be able; they used to go.*

2. Translate into Latin :

- (a) It was impossible for Caesar to accept the terms.
- (b) You ought never to have promised to reward (*praemiis afficere*) the soldiers.
- (c) The soldiers were informed that the camp would be attacked at day-break.
- (d) The tenth legion was not far from capturing the standards of the enemy.

3. Translate into Latin :

- (a) On the news of the defeat, I was persuaded to take up arms under the leadership of Pompeius.
- (b) Whenever Caesar saw his men hard pressed, he would at once send them assistance.
- (c) If Napoleon throws all his forces across the river Rhine, I am afraid that no one will be able to resist his advance.

4. Translate into Latin :

The spring had not yet passed, when the Roman armament sailed for Britain. Caesar took with him five legions and an equal (*par*) number of cavalry, the usefulness of which had been

[OVER.]

proved in the late expedition. Three legions were left under Labienus, to provide for the security of Gaul. The landing was effected without opposition at the same spot as in the preceding summer: and Caesar, leaving ten cohorts to protect his naval station, repaired with the main body to a spot not far from the shore, where he constructed a camp to which he might retreat in case of defeat. This, it is thought, is the foundation of the famous (*celeber*) station of Rutupiae, whose ruins attest to this day the greatness of Roman military works.

Education Department, Ontario

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

GERMAN AUTHORS.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.

Translate into English:

1. Da bransete aber einmal just im bedenklichsten Zeitpunkt das wilde Heer der Kinder in die Halle. Jetzt war alle Mühe vernichtet, Thasso fuhr wie besessen zwischen die Kinder und dann zwischen die Beine der Käufer, als wolle er die verhaltene Lust nun doppelt zügellos genießen. Den Kindern bekam's übel. Mit furchtbarem Schelten wurden sie hinauf zur Mutter geschickt und die beiden Knaben schon anderen Tages dem Schulmeister zur schärferen Zucht übergeben. Auch das Lungen und Balgen auf der Gasse ward ihnen strengstens untersagt. „Sie haben den Hund zu tausend Unarten verführt,“ meinte Meister Michwin, „und wie kann man überhaupt untobt von so wilden Kindern einen jungen Hund erziehen?“ Er beschloß von nun an seinen bösen Augen den Damm scharf auf's Auge zu drücken, damit der Hund Ruhe habe und unverführt bleibe.

2. Michael wollte bescheiden wieder auf seinen Platz zurückgehen, aber die andern duldeten das nicht; jeder wollte ihn ansprechen, beloben, seinen Rat hören: der Leimsieder war mit einem Male der Mann der Volksgunst geworden, obgleich sich doch alle vor ihm hätten schämen sollen, als vor ihrem leibhaften bösen Gewissen, welches ihnen wie ein Spiegel, nur im verkehrten Bild, die eigenen Mängel vorhielt. Keiner zwar zupfte sich an der eigenen Nase, sondern ein jeder seinen Nebenmann, und es gab ein babylonisches Gewirr, in welchem das Lob des Schmieds mit den gegenseitigen Vorwürfen der einzelnen zusammenfloß.

Nun fand sich's auch urplötzlich, daß es in der Rüstkammer fehle und im Probiantgewölbe; denn alle hatten geredet, keiner gerüstet, alle gezechet, keiner gehandelt, den Leimsieder ausgenommen, der sein Haus bestellt hatte für jeden Fall, während er ganz still seinem Tagewerk und seiner Liebshaft nachging.

3. Und stille wird's über dem Wasserschlund,
In der Tiefe nur branset es hohl,
Und bebend hört man von Mund zu Mund:

[OVER.]

„Hochherziger Süngling, fahre wohl!“
Und hohler und hohler hört man's heulen,
Und es harrt noch mit bangem, mit schrecklichem Weilen.

B.

Translate into English :

Elsbet war kaum dreizehn Jahre alt; aber die Mutter hatte frühzeitig das Mädchen zu allen Hausgeschäften angehalten, und da sie eine Freude hatte, im Haus herumzuschaffen und der schwächlichen Mutter gern helfen wollte, so hatte sie gelernt, alles geschickt anzugreifen.

Recht eifrig war sie, als sie den alten Topf ohne Henkel, der am Boden lag, mit Wasser füllte und zum Feuer rückte und sich jetzt umwandte nach dem alten Mann.

“Aber Ihr seht so bleich aus und so schwach! Euch friert's,” sagte sie mitleidig. “Da liegt ja so ein alter brauner Mantel, in den wickelt Euch ein, zu schön ist er nicht dazu,” fügte sie mit Lachen hinzu und bedeckte ihn mit dem groben Kleidungsstück; “vielleicht wird's doch noch warm da mit dem miserablen Holz.”

Er stiesz ihre Hand zurück und sagte ohne Zorn, aber auch ohne Freundlichkeit: “Es friert mich nicht, geh' heim!”

“Will schon gehen,” sagte Elsbet gutmütig und fand noch ein Geschirr auf, das einer zerbrochenen Schüssel gleichsah; darein schüttete sie etwas von dem gewärmten Wasser. “Jetzt müssen wir nur das garstige Blut wegwaschen. Ist kein Schwamm hier? Nun, dann musz ich meinen Schurzzipfel nehmen.”

Der alte Poppel muszte wohl recht schwach sein; denn er liesz sich's ganz gutwillig gefallen, das die Kleine ihm sachte die blutige Stirn und das Gesicht abwusch; ihre weichen Händchen glitten ganz leicht und kühl wie Schneeflocken über die dürre, runzlige Haut des Alten. Aber das Blut begann wieder zu fliesen nach dem Abwaschen. “Wenn ich nur Spinnweben hätte!” sagte Elsbet; es fiel ihr ein, dasz die Mutter das für das Beste hielt, um Blut zu stillen. Dieser bescheidene Wunsch war auch sehr leicht zu erfüllen in dem alten Rauchloch von einer Hütte. Die Spinnweben hingen herum wie Vorhänge. Bald hatte Elsbet, die sich nicht fürchtete vor Spinnen, von dem Gewebe heruntergestreift und das Blut auf's beste gestillt.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

GERMAN GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE.—*The extract is given merely as a basis for the questions which follow, and is not to be translated.*

So verlief die erste Woche. Da geschah es eines Tages, dass die beiden jungen Leute mit dem Oheim im Schlossgarten lustwandelten. Die Pracht der sonnenbestrahlten Schneelandschaft und der herzerquickende Odem der reinen Winterluft gab den Gemütern höheren Schwung; der Leibmedicus fühlte sich mit einem Male so stark und entschlossen, dass er seiner Braut die offenste Beichte hätte ablegen und doch nicht vor Scham in die Erde sinken mögen, wäre nur der Oheim nicht zugegen gewesen, und er nahm sich mannhaft vor, bei der Heimkehr in den unbewachten Minuten der Dämmerstunde die volle und ganze Wahrheit ehrlich zu bekennen. Aus diesen Gedanken ward er plötzlich aufgestört durch das Erscheinen des Fürsten; auf schmalem Pfade ging er an ihnen vorüber, und sein Auge weilte bei der Gruppe mit langem forschenden Blick. Nachdem sie die verschlungenen Gartenpfade eine Strecke weiter gewandelt, begegnete ihnen abermals der Fürst, und fast deuchte es dem Doktor, er habe ihnen geflissentlich den Weg abgeschnitten, um sie noch schärfer als vorher zu betrachten. Ja beim Ausgang aus dem Garten sahen sie ihn zum dritten Male etwas seitab an der Schlosstreppe.

1. Give the genitive singular and nominative plural of
Luft, Braut, Wahrheit, Doktor, Garten, Schwung. [OVER.]

2. Give the German for : *a winding garden path, winding garden paths, alongside a long garden path, the long twilight hours, both the prince and the uncle.*

3. Give the comparative and superlative of *jung, stark, voll, schmal.*

4. (a) Give the third person singular present indicative of *verlieh, geschah, entschlossen, nahm, ward, abgeschnitten, sahen.*

(b) Give in full the present indicative of *mögen* and *sein.*

5. Translate into German :

(a) What has happened ?

(b) Where did you meet him ?

(c) Has he gone to town ?

(d) Did he confess the truth ?

(e) Have you seen her father ?

6. Classify the prepositions in the extract according to the cases they govern, giving the numbers of the lines in which they occur ; also give an additional example, where necessary, to clearly illustrate your answer.

B.—(Composition.)

7. Translate into German :

(a) There are some pretty flowers in the woods in spring-time.

(b) There was a good deal of snow on the roofs in January.

(c) Where are your books ? I have mine here.

(d) The daughters of our neighbour have fine dresses and pretty shoes.

(e) This large black hen lays an egg every day.

8. Translate into German :

(a) Those houses are very small and pretty cold in the winter.

(b) There are a good many trees in Mr. Smith's fields.

(c) Have you seen my father this morning ? No, but I did yesterday.

(d) Where is your little brother going with that basket ? Home ?

(e) Is not that little girl with long golden hair very pretty ?

9. Translate into German :

- (a) At what time does the evening train leave Toronto for Hamilton?
- (b) There are two every day except on Sunday, when there is only one.
- (c) One leaves at a quarter to seven, the other at ten minutes past nine.
- (d) The picture is hanging on the wall and the books are on the table.
- (e) Please go into that little room and bring me my shoes. They are under the table.

10. Translate into German :

The winter of the year 1895 was very cold and a great deal of snow fell in January and February. Old men said they had seldom seen so much snow and of course boys had never. But schoolboys are not afraid of snow and cold weather for then they have plenty of fun sleigh-riding (*Schlittenfahren*) and there is always ice for skating. But sometimes boys get their ears frozen and that is not so pleasant. Poor people do not like the cold weather because it is hard for them to get money enough to buy coal and wood. Oftentimes they have poor houses and wretched (*ärmlich*) clothes and then it is very hard for them to live and keep warm. It does not seem so bad to be poor in the summer, because the weather is warm and people do not need so many clothes. Besides, everything is growing in the gardens and fields and it is easier to get something to eat.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY
PASS MATRICULATION.

GREEK AUTHORS.

Examiners: { WILLIAM DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

Translate :

Τῇ δὲ ὑστεραία ἀπήεσαν οἱ Ἕλληνες, ἔχοντες τὰ ἐπιτήδεια. Ἐπεὶ δὲ τὴν κατάβασιν ἐφοβοῦντο τὴν εἰς Τραπεζοῦντα, πρηνὴς γὰρ ἦν καὶ στενὴ, ψευδενέδραν ἐποιήσαντο. Καὶ ἀνὴρ, Μυσὸς τὸ γένος καὶ τοῦνομα τοῦτο ἔχων, τῶν Κρητῶν λαβὼν δέκα, ἔμενεν ἐν λασίῳ χωρίῳ καὶ προσεποιεῖτο τοὺς πολεμίους πειρᾶσθαι λανθάνειν· αἱ δὲ πέλται αὐτῶν ἄλλοτε καὶ ἄλλοτε διεφαίνοντο χαλκαῖ οὔσαι. Οἱ μὲν οὖν πολέμιοι ταῦτα διορῶντες ἐφοβοῦντο ὡς ἐνέδραν οὔσαν· ἡ δὲ στρατιὰ ἐν τούτῳ κατέβαινε. Ἐπεὶ δὲ ἐδόκει ἤδη ἱκανὸν ὑπεληλυθέναι τῷ Μυσῷ, ἐσήμηνε φεύγειν ἀνὰ κράτος· καὶ ὃς ἐξαναστὰς φεύγει καὶ οἱ σὺν αὐτῷ. Καὶ οἱ μὲν ἄλλοι Κρήτες, ἀλίσκεσθαι γὰρ ἔφασαν τῷ δρόμῳ, ἐκπεσόντες ἐκ τῆς ὁδοῦ εἰς ὕλην, κατὰ τὰς νάπας καλινδούμενοι ἐσώθησαν· ὁ Μυσὸς δὲ κατὰ τὴν ὁδὸν φεύγων ἐβόα βοηθεῖν· καὶ ἐβοήθησαν αὐτῷ καὶ ἀνέλαβον τετρωμένον. Καὶ αὐτοὶ ἐπὶ πόδα ἀνεχώρουν βαλλόμενοι οἱ βοηθήσαντες καὶ ἀντιτοξεύοντές τινες τῶν Κρητῶν. Οὕτως ἀφίκοντο ἐπὶ τὸ στρατόπεδον πάντες σῶοι ὄντες.

XENOPHON, *Anabasis*, V.

1. State the mood, tense, and voice, and give the principal parts of ὑπεληλυθέναι, ἐσήμηνε, ἐξαναστὰς, ἐκπεσόντες, τετρωμένον, ἀφίκοντο.

2. Write in uncontracted form ἐφοβοῦντο, τοῦνομα, ἐδόκει, ἐβόα.

(OVER.)

3. Supply (in Greek) the words omitted after ὑστεραίᾳ, ἐν τούτῳ, and οἱ σὺν αὐτῷ. Give (in Greek) the "direct speech" (word actually used) for ἀλίσκεσθαι, and state when the subject of the infinitive in indirect speech is omitted.

4. In what way are the following places connected with Xenophon: Athens, Cynaxa, Trapezus, Scyllus, Mantinea?

B.

Translate :

“ Ἄλλ’ οὐ μοι Τρώων τόσσον μέλει ἄλγος ὀπίσσω,
Οὐτ’ αὐτῆς Ἑκάβης οὔτε Πριάμοιο ἄνακτος
Οὔτε κασιγνήτων, οἳ κεν πολέες τε καὶ ἐσθλοὶ
Ἐν κονίησι πέσοιεν ὑπ’ ἀνδράσι δυσμενέεσσιν,
Ὅσσον σεῦ, ὅτε κέν τις Ἀχαιῶν χαλκοχιτώνων
Δακρυόεσσαν ἄγεται, ἐλεύθερον ἡμᾶρ ἀπούρας.
Καί κεν ἐν Ἀργεὶ ἐοῦσα πρὸς ἄλλης ἱστὸν ὑφαίνοις,
Καί κεν ὕδωρ φορέοις Μεσσηίδος ἢ Ὑπερείης
Πόλλ’ ἀεκαζομένη, κρατερὴ δ’ ἐπικείσεται ἀνάγκη.
Καί ποτέ τις εἶπῃσιν ἰδὼν κατὰ δάκρυ χέουσαν,
“ Ἐκτορος ἦδε γυνή, ὃς ἀριστεύεσκε μάχεσθαι
Τρώων ἵπποδάμων, ὅτε Ἴλιον ἀμφεμάχοντο.”
Ὡς ποτέ τις ἐρέει· σοὶ δ’ αὖ νέον ἔσσεται ἄλγος
Χήτεϊ τοιοῦδ’ ἀνδρὸς, ἀμύνειν δούλιον ἡμᾶρ.
Ἀλλὰ με τεθνηῶτα χυτὴ κατὰ γαῖα καλύπτει
Πρὶν γ’ ἔτι σῆς τε βοῆς σοῦ θ’ ἐλκηθμοῖο πυθέσθαι.”

HOMER, *Iliad*, VI.

5. Who is the speaker? Who is addressed? Scan the first two lines of the extract.

6. Give Attic forms for κέν, πολέες, κονίησι, σεῦ, ἐοῦσα, εἶπῃσιν, ἀριστεύεσκε, ἐρέει, ἔσσεται.

7. Write a grammatical note on ἄλγος ὀπίσσω, πέσοιεν, ἄγεται (mood and voice), κατὰ.

8. Give the literal meaning of the following epithets, and state to what each is applied and why: δολιχόσκιος, ἡπιόδωρος, ρεῖα ζῶντες, ῥοδοδάκτυλος, εἰλίποδες.

C.

Translate :

Ἀκούσας ταῦτα ὁ Σεύθης εἶπεν, ὅτι οὐδενὶ ἂν ἀπιστήσειεν Ἀθηναίων· καὶ γὰρ ὅτι συγγενεῖς εἶεν εἰδέναι, καὶ φίλους αὐτοὺς ἔφη νομίζειν. Μετὰ ταῦτα δ’ ἐπεὶ εἰσῆλθον οὓς ἔδει, πρῶτον Ξενοφῶν ἐπήρετο Σεύθην, ὅ τι (for what) δέοιτο χρῆσθαι τῇ στρατιᾷ. Ὁ δὲ εἶπεν ὧδε· “ Μαισάδης ἦν πατήρ μοι, ἐκείνου δ’ ἦν ἀρχὴ Θυνοὶ.

Ἐκ ταύτης οὖν τῆς χώρας, ἐπεὶ τὰ πράγματα ἐνόησεν, ἐκπεσὼν ὁ πατήρ αὐτὸς μὲν ἀποθνήσκει νόσῳ, ἐγὼ δ' ἐξετράφην ὀρφανὸς παρὰ Μηδόκῳ τῷ νῦν βασιλεῖ. Ἐπεὶ δὲ νεανίσκος ἐγενόμην, οὐκ ἐδυνάμην ζῆν εἰς ἀλλοτρίαν τράπεζαν ἀποβλέπων· καὶ ἦτουν αὐτὸν δοῦναί μοι ὑπόσους δυνατὸς εἶη ἄνδρας, ὅπως καὶ τοὺς ἐκβαλόντας ἡμᾶς, εἴ τι δυναίμην, κακὸν ποιοίην. Καὶ νῦν ἐγὼ ζῶ τούτους ἔχων, ληϊζόμενος τὴν ἐμαυτοῦ πατρώαν χώραν. Εἰ δέ μοι ὑμεῖς παραγένοισθε, οἶμαι ἂν σὺν τοῖς θεοῖς ῥαδίως ἀπολαβεῖν τὴν ἀρχήν."

XENOPHON, *Anabasis*, VII.

ἀπιστέω, *disbelieve*.

συγγενής, *kinsman*.

τὰ πράγματα, *state affairs*.

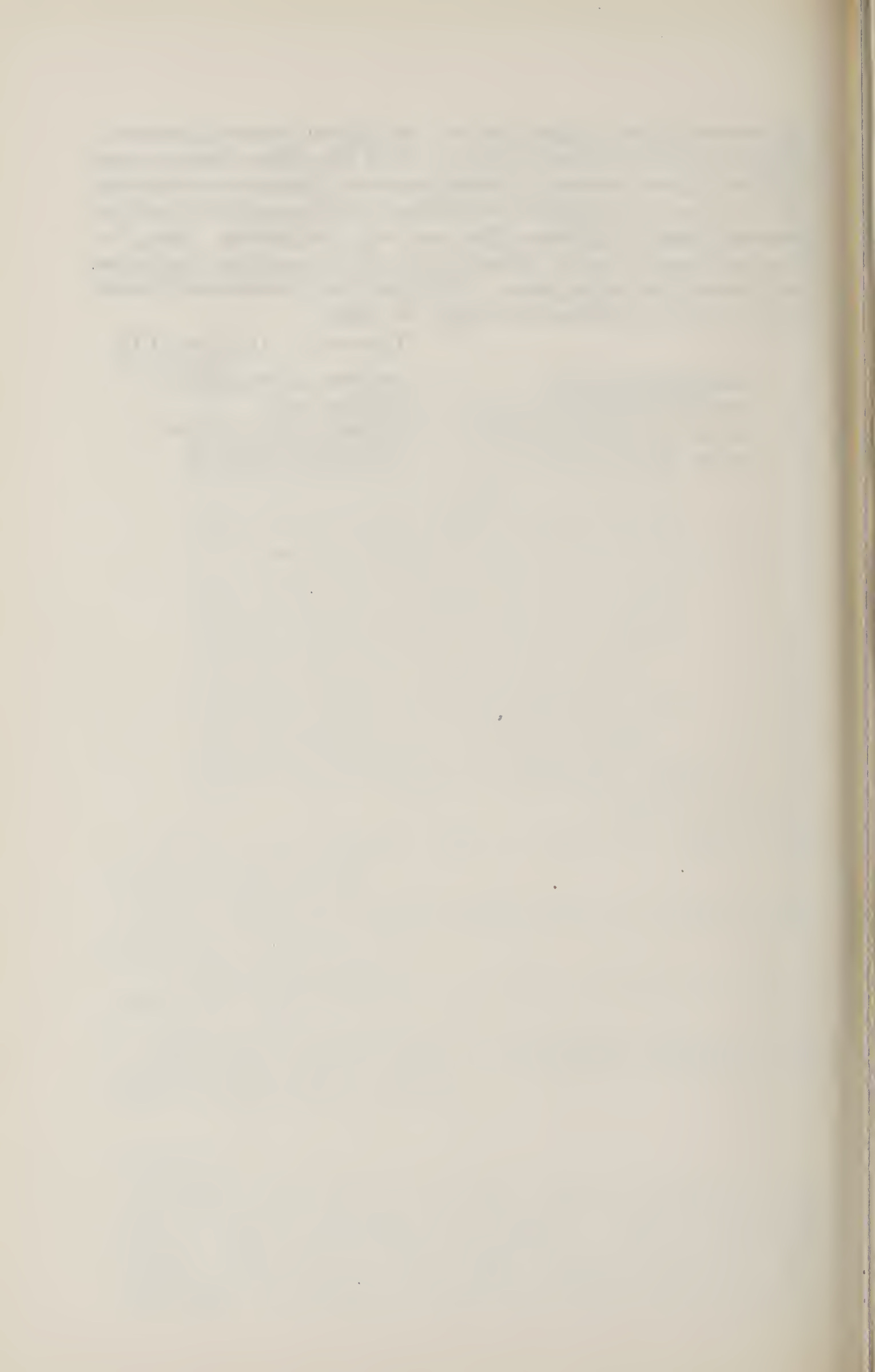
νοσέω, *be in disorder*.

ἐκπίπτω, *be banished*.

ἐκτρέφω, *rear*.

νεανίσκος, *young man*.

ἀλλότριος, *another's*.



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ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY
PASS MATRICULATION.

GREEK GRAMMAR AND COMPOSITION.

Examiners : { WILLIAM DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

1. Give the nominative and genitive singular of πόλεις, μάντιν, αἶγας, βελῶν, ἔω, τάδε, ταῦτα, ἡμῖν, ὅτω, οἷς.

2. Give the first person singular present indicitive of εἶναι, ἰέναι, ἴσπε, εἶχον, ἄξω, μείναι, ἤρηνται, ἀνέρωγον, ἐωρακότες, ἐμβιβῶ are formed.

3. Write down the Greek for *worse, least, greatest, most ; these men ; the same things ; better men than your fathers ; the rest were taken ; do not tell them.*

4. Translate into Greek any *four* of the following sentences :

(a) He considers that this city is hostile to himself.

(b) They gave him money and ships ; but the ships were lost, crews and all.

(c) They used to go to him to inquire about virtue.

(d) They went away that they might not see us.

(e) He kept calling out (βοάω) and trying (ἐπιχειρέω) to say that it was just (δίκαιος).

(f) He knew that we were not without experience (ἄπειρος), because of our always being present (use διά and the infinitive).

(g) Ask (ἐρωτάω) the man yourself not to go away till (πρὶν ἄν) he hears what the matter is.

(h) I must say that some of us were afraid (δείδω) that madness (λύττα) had fallen upon them (ἐμπίπτω).

(OVER.)

5. Translate into Greek :

One of the captains, however, happened to be present and he rose and spoke as follows : "I hear, soldiers, that our general intends to found (κατοικίζω) a city here, thinking that in this way he will acquire (προσκτάομαι) power and territory (χώρα) for Hellas and a great name for himself. What do you intend to do about it? If I saw you willing to remain, I should keep silence; but, as I know you are unwilling, I have spoken, while prevention is still possible" (use ἔξεστι and an infinitive).

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THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ENGLISH GRAMMAR AND RHETORIC.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

A.

The wish, that of the living whole
No life may fail beyond the grave,
Derives it not from what we have
The likest God within the soul?

Are God and Nature then at strife 5
That Nature lends such evil dreams?
So careful of the type she seems,
So careless of the single life;

That I, considering everywhere 10
Her secret meaning in her deeds,
And finding that of fifty seeds
She often brings but one to bear,

I falter where I firmly trod, 15
And falling with my weight of cares
Upon the great world's altar-stairs
That slope thro' darkness up to God,

I stretch lame hands of faith, and grope 20
And gather dust and chaff, and call
To what I feel is Lord of all,
And faintly trust the larger hope.

1. Analyze the first thirteen lines of the above extract so far as to show the kinds and relationships of the several clauses therein contained.

[N.B.—If the subordinate clause is connected with some one word especially, be careful to specify that word, and the manner in which it is modified by such clause.]

[OVER.]

2. Explain clearly the grammatical functions and relations of
of

- | | |
|--------------------|----------------------|
| "wish" (line 1), | "but" (line 12), |
| "likest" (line 4), | "to bear" (line 12), |
| "then" (line 5), | "falling" (line 14). |

3. (a) What is the grammatical distinction between a *phrase* and a *clause*?

Show how this distinction applies to:—

- (i) "from what we have
The likest God within the soul" (lines 3, 4).
- (ii) "To what I feel is Lord of all" (line 19).
- (iii) "But O for the touch of a vanish'd hand!"

(b) Select, and explain the relation of, each adjectival phrase and each adverbial phrase, in the first three stanzas of the extract.

4. "Just as prepositions have been described as transitive adverbs, so conjunctions have been described as relative adverbs."

Show clearly, by examples, what is meant by this statement.

5. In the following sentences

- (a) Consider the lilies of the field, how they grow.
- (b) It never rains but it pours.
- (c) It is to you I am putting the question.
- (d) Howsoever these things be, a long farewell to Locksley Hall.
- (e) I am sure it is so.
- (f) He has been long dead, as is well known.

(i) show the exact value and relation of each subordinate clause, noticing any difficulties or peculiarities, and (ii) explain the grammatical function and relation of "how" (a); "but" (b); "Howsoever" (d); "so" (e); "as" (f).

B.

It is impossible to guess how Mr. Kipling will fare if he ventures on one of the usual novels, of the orthodox length. Few men have succeeded both in the *conte* (*short story*) and the novel. Mr. Bret Harte is limited to the *conte*; M. Guy de Maupassant is probably at his best in it. Scott wrote but three or four short tales, and only one of these is a masterpiece. Poe never attempted a novel. Hawthorne is almost alone in his command of both kinds. We can live only in the hope that Mr. Kipling, so skilled in so many species of the *conte*, so vigorous in so many kinds of verse, will also be triumphant in the novel: though it seems unlikely that its scene can be in England, and though it is certain that a writer who so cuts to the

quick will not be happy with the novel's almost inevitable "padding." Mr. Kipling's longest effort, "The Light which Failed," can, perhaps, hardly be considered a test or touchstone of his powers as a novelist. The central interest is not powerful enough; the characters are not so sympathetic, as are the interest and the characters of his short pieces. Many of these persons we have met so often that they are not mere passing acquaintances, but already find in us the loyalty due to old friends.

6. (a) Name the sentences where there is no special word to indicate connection, and, in each case, justify the omission.

(b) Improve the last sentence of the extract as to clearness of reference.

7. (a) In the 7th sentence ("We can live inevitable 'padding.'") what is the relation in thought of the two parts separated by the colon?

(b) Rewrite the sentence as two sentences.

(c) Criticise the structure of the 9th sentence ("The central interest his short pieces.") and show how it may be improved.

8. Write notes on the following sentences as to the order of words, phrases and clauses; where necessary, improve the order, giving reasons for any changes made:—

(a) Misty, therefore, the poet has our kind permission sometimes to be; but muddy, never!

(b) We can live only in the hope that he will also be triumphant in the novel.

(c) Me he restored unto mine office, and him he hanged.

(d) Though some of the European rulers may be females, when spoken of altogether, they may be correctly classified as kings.

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THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

HISTORY AND GEOGRAPHY.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

A.—ENGLISH AND CANADIAN HISTORY.

1. Give a brief account of the reign of William III., so far as it may be described under the following heads:—

- (a) The attitude of the various religious bodies towards the Crown, in England, Scotland and Ireland.
- (b) The Civil War in Ireland.
- (c) The National Debt.
- (d) The Bank of England.
- (e) Rise of Party Government.
- (f) Foreign Politics.
- (g) Personal Character of the King.

2. Give some account of the political situation and of the events in the reign of George III. bearing on the development of the freedom of the Press and the increase of its influence. Mention any legislation or other parliamentary action during the period (1688—1815), concerned with liberty of publication. What hindered the progress of the Press under the first two Georges?

3. Tell what you know of the younger Pitt's schemes of (a) financial, (b) constitutional reform. To what extent were they successfully carried out?

4. Describe, as clearly and as fully as possible, the causes leading to the Revolutionary War which resulted in the independence of America. What part did Canada play in that struggle?

[OVER.]

5. Name, and, by means of a map, give the position of the American Colonies which declared their independence in 1776.

B.—ANCIENT HISTORY.

6. State the causes (immediate and remote) of the Peloponnesian War, and give a concise account of that struggle from the destruction of the Athenian armament at Syracuse to the downfall of Athens.

7. Outline briefly the struggle at Rome between the Patricians and the Plebeians from its commencement down to the passing of the Licinian Rogations. Describe the legislation embodied in those statutes.

8. "The allies of the Athenians, in the Peloponnesian War, were Chios, Lesbos, Plataeae, the Messenians at Naupactus, the greater part of Acarnania, Zacynthus and Corcyra."

What and where was each of the places mentioned in this sentence?

9. Name and give the situation of the various countries and provinces which constituted the Roman Empire at the death of Augustus. As far as possible, give both ancient and modern names.

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THE HIGH SCHOOL JUNIOR LEAVING AND
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UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ARITHMETIC AND MENSURATION.

Examiners: $\left\{ \begin{array}{l} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{array} \right.$

1. Find the interest on \$1745.60, from Feb. 11th, 1894, to Jan. 2nd, 1895, at $6\frac{3}{8}$ per cent. per annum.

2. For what sum must a 60-day note be drawn, so that if discounted immediately at a bank at 5 per cent. per annum, it will yield \$289.48?

3. A can do a certain piece of work in 8 days, working 10 hours a day; B can do the same work in 9 days, working 9 hours a day. They work together and finish the work in 4 days. How many hours a day did they work?

4. How much 5 per cent. stock must I sell at 90, if my yearly income is increased by \$20 by investing the proceeds in 6 per cent. stock at 102?

5. (a) Find, to the nearest cent, the compound interest on \$1000 for 4 years at 4 % per annum.

(b) Find, within one one-hundredth of an inch, the radius of a sphere whose volume is one cubic foot. $[\pi=3.14159]$.

6. Show that the G.C.M. of several fractions in their lowest terms is the fraction formed by dividing the G.C.M. of the numerators by the L.C.M. of the denominators.

7. An integer of four digits has its first and last digits interchanged. Show that the difference between this number and the original number is a multiple of 37. [OVER.]

8. If a sum of money doubles itself in 10 years at a certain rate of interest (compounded yearly), what is the amount of \$500 in 30 years at the same rate?

9. The areas of the three unequal faces of a rectangular solid are 383.76 sq. in., 720.72 sq. in., and 284.13 sq. in., respectively. Find the lengths of its edges.

10. A mortgage of \$6000, paying 6 % interest yearly, is to be paid off at the end of two years. What is its present value, banks paying 4 % per annum, compounded yearly, on deposits.

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UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

PHYSICS.

Examiners: $\left\{ \begin{array}{l} \text{R. R. BENSLEY, B.A.} \\ \text{C. A. CHANT, B.A.} \\ \text{A. P. KNIGHT, M.A.} \end{array} \right.$

NOTE.—(a) *Give diagrams whenever possible.*

(b) *Experiments are to be clearly and definitely described, and must be such as can be easily performed in an ordinary school.*

1. A bullet of mass 50 grams is shot vertically upward with a velocity of 200 metres per second. Taking the acceleration of gravity in the centimetre-gram-second system to be 980 and neglecting the resistance of the air, find

- (a) how long it takes to reach the highest point;
- (b) its (potential) energy at the highest point, and also its (kinetic) energy on reaching the ground again;
- (c) its momentum 2 seconds after leaving the gun.

Give the units in each case.

2. (a) Show how a wind-mill, used for pumping purposes, transforms energy of one kind into another.

(b) A uniform beam is 4 feet long and weighs 8 pounds. It lies on a horizontal table, 1 foot projecting over the edge. How great a weight can be placed on the outer end before the other end, upon which a 5-pound weight is placed, will leave the table?

3. A rectangular vessel has the following dimensions: 5 centimetres wide, 10 centimetres long, and 20 centimetres deep. It is filled with sulphuric acid whose specific gravity is 1.8. Find the total pressure on the bottom, and on each of the four sides.

[OVER.]

4. (a) A mass of iron, weighing 15 kilograms and having a specific gravity 7.5, is attached to a string and suspended in the water. Find the tension on the string.

- (b) How would you find the specific gravity
(i) of a piece of lead;
(ii) of some turpentine?

5. (a) State Charles's Law, and also Boyle's (or Marriotte's) Law.

(b) A quantity of gas, measured at 10°C . and 750mm., is 500c.c.; find the volume at 0°C . and 760mm.

6. (a) Explain briefly a simple method for finding the specific heat of iron. State where the method is defective and also how it could be improved.

(b) Explain why in a cold room iron or stone appears much colder to the hand than the woollen carpet.

(c) How would you show that water is a poor conductor of heat?

7. (a) Explain the terms *ohm*, *volt*, *ampere*, and indicate approximately their values by reference to ordinary pieces of apparatus.

(b) The resistances of iron and copper, relative to silver, are 6.46 and 1.06, respectively. The resistance of 700 feet of No. 24 copper wire is 20 ohms; find the resistance of a mile of iron wire No. 18, whose diameter is twice that of the copper wire. (Answer to three decimal places.)

8. You have four gravity cells, each of E.M.F. 1.1 volts and internal resistance 3 ohms, and you wish to send a current through a coil whose resistance is 4 ohms. Show, by diagrams, the three ways of connecting the four cells, and estimate the current in each case.

9. Draw a diagram of a telephone circuit connecting two places a considerable distance apart, and explain definitely the action of the receiver and the transmitter.

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THE HIGH SCHOOL JUNIOR LEAVING AND
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UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ALGEBRA.

Examiners: $\begin{cases} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{cases}$

1. Divide $x^5 - 2x^4 - 4x^3 + 13x^2 - 11x - 7$ by $x^3 - 3x + 7$, and determine what values of x will cause the quotient to vanish.

2. Given $\frac{a+3x}{4a} - \frac{7a-5x}{6b} + 3 - \frac{9x}{4} = \frac{x}{ab} + \frac{5x}{6b}$, to find x .

3. Show, without performing the work of division, that $(3x^2 - 4x + 2)^2 - (2x^2 + 9x + 3)^2$ is exactly divisible by $x^2 + x + 1$.

4. If $x + y + z - xyz = 2$, prove that $(1-x)^2 = (1-xy)(1-xz)$.

5. If $\frac{ad-bc}{a-b-c+d} = \frac{ac-bd}{a-b+c-d}$, show that each fraction equals $\frac{a+b+c+d}{4}$, and that $a+b=c+d$.

6. Solve $x^2 + y^2 - x - y = 78$.
 $xy + x + y = 39$.

[OVER.]

7. If $x = -1 + 2\sqrt{-1}$, find the numerical value of $x^4 - 12x$, giving the work in full

8. The diagonal of a rectangle is 65 inches; if the rectangle were 3 inches shorter and 9 inches wider, the diagonal would be 65 inches. Find the area of the rectangle.

9. (a) Find the square root of $25 - 4\sqrt{21}$;

(b) Simplify $\frac{\sqrt{6} + \sqrt{3} - \sqrt{2} - 2}{\sqrt{3} - \sqrt{2}}$ by rationalising the denominator.

10. Factor

(a) $8a^3 - b^3 + c^3 + 6abc.$

(b) $1 - \left(\frac{a^2 + b^2 - c^2}{2ab} \right)^2.$

11. If m and n are the roots of $ax^2 + b^2x + c^3 = 0$, and p and q are the roots of $cz^2 + b^2z + a^3 = 0$; show that

$$\frac{m+n}{p+q} = \left(\frac{mn}{pq} \right)^{\frac{1}{4}}.$$

12. A number consisting of two digits is so altered by interchanging its digits that its first value is to its second as n to m ; show that the digits themselves are as $10n - m$ to $10m - n$.

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THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

CHEMISTRY.

Examiners : $\left\{ \begin{array}{l} \text{R. R. BENSLEY, B.A.} \\ \text{C. A. CHANT, B.A.} \\ \text{A. P. KNIGHT, M.A.} \end{array} \right.$

1. Describe how you would separate alum from a mixture of powdered alum and blue vitriol.

2. (a) Compare the action of hot iron on steam with the action of sodium on warm water. Give equations.

(b) Define *chemical equivalent* and show how your definition applies to the two foregoing reactions.

3. Describe experiments to show how you would distinguish between finely powdered charcoal and manganese dioxide; between a jar of carbon monoxide and one of hydrogen; between a jar of hydrochloric acid gas and one of sulphur dioxide.

4. The average composition of coal gas is: hydrogen 45 %; methane 35 %; carbon monoxide 7 %; olefiant gas 4 %; butylene (C_4H_8) 2.4 %; sulphuretted hydrogen 0.3 %; nitrogen 2.5%; carbon dioxide 3.8%. What volume will the products of the combustion of 100 litres of such a gas occupy at 20°C and 750 mm. pressure?

5. Explain, using equations, what changes take place in the following experiments :—

(a) Dry sulphuretted hydrogen is passed over iron filings in a glass tube.

(b) Sulphur dioxide is passed into a vessel containing nitrogen peroxide.

(c) Carbon dioxide is passed over ignited sodium.

[OVER.]

6. Ferrous sulphide (FeS) is heated strongly in a hard glass tube open at both ends. Express the reaction which takes place by an equation.

7. The percentage composition of a gas is nitrogen 46.67, oxygen 53.33. Its vapor density ($H=1$) is 15. Calculate the formula of the gas.

8. (a) When 50 c.c. of hydrogen and 30 c.c. of chlorine are exploded in a eudiometer, what are the volume and the composition of the resulting gas at standard temperature and pressure?

(b) 50 c.c. of hydrochloric acid gas are placed in a eudiometer over mercury; some sodium amalgam is then introduced and the lower end of the tube is firmly closed with the finger and the whole inverted a number of times so that the gas may come freely into contact with the amalgam. The tube is again inverted over mercury and the volume measured. What changes have taken place? Explain.

(c) Show the relation of these experiments to the statement that "hydrogen is represented by the symbol H_2 ."

9. Sketch the chemistry of iodine.

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THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

EUCLID.

Examiners: { A. R. BAIN, LL.D.
N. F. DUPUIS, M.A.
A. C. MCKAY, B.A.

1. Draw a perpendicular to a given line from a point not on the line. Euc. I., 12.

2. Two triangles which have two angles of the one respectively equal to two angles of the other, and a side, similarly placed with respect to equal angles in each, equal, are equal in every respect, or congruent. Euc. I., 26.

3. If a straight line be divided into two parts, the square on the whole line is equal to the sum of the squares on the parts and twice the rectangle contained by the parts. Euc. II., 4.

4. The square on the longest side of an obtuse-angled triangle exceeds the sum of the squares on the other two sides, by twice the rectangle contained by one of these sides and the part intercepted between the obtuse vertex and the foot of the perpendicular from the other vertex to this side. Euc. II., 12.

5. The perpendicular to a diameter of a circle at its extremity touches the circle at that point, and any other line drawn through this point cuts the circle. Euc. III., 16.

6. The angles between a tangent to a circle and a chord to its point of contact are equal to those in the opposite segments into which the chord divides the circle. Euc. III., 32.

7. From question 1 show either that a straight line meets a circle in two points only, or that more than one perpendicular can be drawn from a given point to a given line.

[OVER.]

8. Under what conditions are two triangles equal in every respect, when they have two sides respectively equal, and one angle, opposite an equal side in each, equal?

9. If a line be divided into three parts, the square upon the whole line is equal to the sum of the squares on the parts and twice the sum of the rectangles contained by the parts taken two and two. (This must be proved geometrically).

10. (a) Show that a circle may be drawn through three arbitrary points and no more.

(b) Explain why a circle cannot be made to touch two given lines at two arbitrary points, one in each line.

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THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ENGLISH COMPOSITION.

Examiners : { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

NOTE.—*The candidate will write on ONE, and only one, of the following themes :*

1. Queen Elizabeth.
2. Astrology and Alchemy.
3. Cowper, the Poet of Country Life.
4. Confederation.
5. French Canada.
6. Examinations.

[NOTE.—Any proper names the candidate uses must be *fictitious*,
not real names.]

7. A Description :

[Illustrating the lines

“Now fades the glittering landscape on the sight,
And all the air a solemn stillness holds.”]

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THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ENGLISH POETICAL LITERATURE.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

So many minds did gird their orbs with beams,
Tho' one did fling the fire.
Heaven flow'd upon the soul in many dreams
Of high desire.

Thus truth was multiplied on truth, the world 5
Like one great garden show'd,
And thro' the wreaths of floating dark upcurl'd
Rare sunrise flow'd.

And Freedom rear'd in that august sunrise
Her beautiful bold brow, 10
When rites and forms before his burning eyes
Melted like snow.

There was no blood upon her maiden robes
Sunn'd by those orient skies ;
But round about the circles of the globes 15
Of her keen eyes

And in her raiment's hem was trac'd in flame
Wisdom, a name to shake
All evil dreams of power—a sacred name.
And when she spake, 20

Her words did gather thunder as they ran,
And as the lightning to the thunder
Which follows it, riving the spirit of man,
Making earth wonder,

So was their meaning to her words. No sword 25
Of wrath her right arm whirl'd
But one poor poet's scroll, and with *his* word
She shook the world.

[OVER.]

1. Within the compass of twelve lines of manuscript give, in simple, prosaic language, a consecutive abstract of the thought conveyed in the passage quoted.

2. Express, fully but concisely, in plain prose, the substantial meaning conveyed by each of the following passages:—lines 1 and 2, lines 9 to 12, and from “No sword” (line 25) to end.

3. (a) Give an outline of *The Holy Grail*, about a page of manuscript in length.

(b) In a sentence or two, state the symbolic, or allegorical significance of the same poem.

4. Quote *either* some 20 consecutive lines of *The Lotos Eaters*, or of *Morte D'Arthur*, or three consecutive stanzas of *The Day Dream*.

5. Indicate in what connection any *four* of the following passages appear:—

- (a) Let us alone. Time driveth onward fast,
And in a little while our lips are dumb.
- (b) For we are ancients of the Earth,
And in the Morning of the Times.
- (c) God make thee good as thou art beautiful.
- (d) Why should we only toil, the roof and crown of things?
- (e) The old order changeth, yielding place to new,
And God fulfils himself in many ways.
- (f) And on a sudden, lo! the level lake
And the long glories of the winter moon.

6. Explain the words in italics in the following:—

- (a) Beneath a world old yew tree, darkening half
The cloisters, on a gustful April morn
That puff'd the swaying branches into smoke.
- (b) Knights that in twelve great battles splash'd and dyed
The Strong White Horse in his own heathen blood.
- (c) *Perhaps like him of Cana in Holy Writ,*
Our Arthur kept his best until the last.
- (d) Engarlanded and *diaper'd*
With inwrought flowers.
- (e) *Little breezes dusk and shiver.*
- (f) *Those*
Who dabbling in the fount of fictive tears,
And nursed by mealy-mouth'd philanthropies,
Divorce the Feeling from her mate the Deed.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

FRENCH AUTHORS.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.

1. Translate :

Au même instant ils entendirent du bruit sous le vestibule ; la porte de la grande salle s'ouvrit brusquement, et l'agent mis en faction par Tricamp entra, poussant devant lui Christiane qui paraissait plus surprise qu'effrayée !...

“ Monsieur Tricamp, dit l'agent, c'est une jeunesse qui allait sortir, et que j'ai arrêtée comme elle tirait les verrous.”

Christiane les regardait tous avec un étonnement si naturel, que tout le monde y eût été pris..., sauf pourtant M. Tricamp...

“ Mais enfin, qu'est-ce que vous me voulez ? dit-elle à l'agent qui fermait la porte derrière elle... — Monsieur Balthazar, dites-lui donc qui je suis !

— D'où viens-tu ? dit Balthazar.

— De là-haut, répondit-elle. Gudule a peur du tonnerre ; comme il grondait encore quand elle est montée se coucher, elle m'a priée de lui tenir compagnie, et j'ai dormi dans sa chambre, sur un fauteuil. Je me suis réveillée, j'ai vu le beau temps revenu, je suis descendue pour me mettre au lit ; et j'allais m'assurer que vous n'aviez pas oublié de tirer les verrous, lorsque ce monsieur m'a arrêtée.... Et il m'a fait joliment peur !...

2. Translate :

Ce fut encore un mauvais tour de ma moitié.— Effrayée par la voix d'un pauvre qui demanda tout à coup l'aumône à ma porte et par les aboiements de Rosine, elle fit tourner brusquement mon fauteuil, avant que mon âme eût le temps de l'avertir qu'il manquait une brique derrière ; l'impulsion fut si violente que ma chaise de poste se trouva absolument hors de son centre de gravité et se renversa sur moi.

[OVER.]

Voici, je l'avoue, une des occasions où j'ai eu le plus à me plaindre de mon âme; car au lieu d'être fâchée de l'absence qu'elle venait de faire et de tancer sa compagne sur sa précipitation, elle s'oublia au point de partager le ressentiment le plus animal et de maltraiter, de paroles, ce pauvre innocent.—Fainéant! allez travailler, lui dit-elle. (Apostrophe exécration, inventée par l'avare et cruelle richesse!) “Monsieur, dit-il alors pour m'attendrir, je suis de Chambéry.—Tant pis pour vous!—Je suis Jacques: c'est moi que vous avez vu à la campagne; c'est moi qui menais les moutons aux champs.—Que venez-vous faire ici?” Mon âme commençait à se repentir de la brutalité de mes premières paroles.—Je crois même qu'elle s'en était repentie un instant avant de les laisser échapper. C'est ainsi que lorsqu'on rencontre inopinément dans sa course un fossé ou un bournier, on le voit, mais on n'a plus le temps de l'éviter.

B.

Translate :

Le bœuf ne convient pas autant que le cheval, l'âne, le chameau, etc., pour porter des fardeaux; la forme de son dos et de ses reins le démontre: mais la grosseur de son cou et la largeur de ses épaules indiquent assez qu'il est propre à tirer et à porter le joug: c'est aussi de cette manière qu'il tire le plus avantageusement; et il est singulier que cet usage ne soit pas général, et que dans des provinces entières on l'oblige à tirer par les cornes: la seule raison qu'on ait pu m'en donner, c'est que quand il est attelé par les cornes, on le conduit plus aisément; il a la tête très forte, et il ne laisse pas de tirer assez bien de cette façon, mais avec beaucoup moins d'avantage que quand il tire par les épaules: il semble avoir été fait pour la charrue; la masse de son corps, la lenteur de ses mouvements, le peu de hauteur de ses jambes, tout, jusqu'à sa tranquillité et à sa patience dans le travail, semble concourir à le rendre propre à la culture des champs, et plus capable qu'aucun autre de vaincre la résistance constante et toujours nouvelle que la terre oppose à ses efforts: le cheval, quoique peut-être aussi fort que le bœuf, est moins propre à cet ouvrage; il est trop élevé sur ses jambes, ses mouvements sont trop grands, trop brusques; et d'ailleurs il s'impatiente et se rebute (*is discouraged*) trop aisément: on lui ôte même toute la légèreté, toute la souplesse de ses mouvements, toute la grâce de son attitude et de sa démarche, lorsqu'on le réduit à ce travail pesant, pour lequel il faut plus de constance que d'ardeur, plus de masse que de vitesse, et plus de poids que de ressort (*elasticity*).

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ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

FRENCH GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE.—*The extract is given merely as a basis for the questions that follow, and is not to be translated.*

Qu'on n'aille pas croire qu'au lieu de tenir ma parole en donnant la description de mon voyage autour de ma chambre, je bats la campagne pour me tirer d'affaire : on se tromperait fort, car mon voyage continue réellement ; et pendant que mon âme, se repliant sur elle-même, parcourait, dans le cha- 5 pitre précédent, les détours tortueux de la métaphysique, — j'étais dans mon fauteuil, sur lequel je m'étais renversé, de manière que ses deux pieds antérieurs étaient élevés à deux pouces de terre ; et, tout en me balançant à droite et à gauche, et gagnant du terrain, j'étais insensiblement parvenu 10 tout près de la muraille. — C'est la manière dont je voyage lorsque je ne suis pas pressé. — Là ma main s'était emparée machinalement du portrait de madame de *Hautcastel*, et *l'autre* s'amusait à ôter la poussière qui le couvrait. — Cette occupation lui donnait un plaisir tranquille, et ce plaisir se 15 faisait sentir à mon âme, quoiqu'elle fût perdue dans les vastes plaines du ciel.

1. From examples occurring in the extract, deduce rules for the use of *être* as an auxiliary verb.

2. Write the third persons singular and plural of the present indicative of *aille* (line 1), *tenir* (line 1), *bats* (line 3), *élevés* (line 8), *couvrait* (line 14), *faisait* (line 16), *sentir* (line 16), *perdue* (line 16). [OVER.]

3. Write the third person singular future indicative of *aille* (line 1), *tirer* (line 3), *parcourait* (line 5), *parvenu* (line 10), *couvrait* (line 14), *faisait* (line 16), *fût* (line 16), *perdue* (line 16).

4. Point out peculiarities of conjugation in the verbs *balancer*, *voyager*. Give one example for each verb.

5. Translate, *using the second person singular* :

(a) Do not make a mistake.

(b) Amuse yourself.

6. *sur lequel* (line 7). When is *lequel* used as a relative, and when *que*?

7. *à droite et à gauche* (lines 9, 10). Account for the gender of the words *droite* and *gauche*.

B.—(Composition.)

NOTE.—*Numerals must be written in words, not in figures.*

8. Translate into French :

(a) You will be hungry before noon, will you not?

(b) He will not be sleepy before half past nine, will he?

(c) They wanted to go to town at twenty-five minutes after ten in the morning.

(d) He does not intend to go to bed till a quarter to eleven.

(e) Tell me whether he is right or wrong in going away.

9. Translate into French :

(a) What a boy! He is always doing what he ought not to do.

(b) What a pretty song! I have heard it only once.

(c) Who is that lady yonder? We have not seen her before.

(d) What are you looking for? For the horses we have lost.

(e) What are you thinking of? Of something nice.

10. Translate into French :

(a) Send me a pair of shoes from town, please.

(b) We shall send you some as soon as we can buy them.

(c) Send for some cold water, or tea and coffee; we are thirsty.

(d) I have already sent the servant for some.

(e) We shall go and get meat for your mother at the market.

11. Translate into French :

- (a) Three generals were killed in 1115.
- (b) He had his house built in 1566.
- (c) The old church was burned in 1784.
- (d) The new building had to be finished in the spring of 1893.
- (e) Queen Victoria was born May 24th, 1819, and is now seventy-six years old.

12. Translate into French :

It is said that a certain professor in Edinburgh wished to marry Christopher North's daughter. He had not courage enough to ask the father to consent to the marriage, and he therefore sent the young lady to ask him for his consent. This she did. When the father had found out that she was willing to marry the professor, he wrote a few words on a piece of paper, fastened it to her dress, and told her to tell the professor that his answer was on her back. When the professor heard this, he looked at the young lady's back, and read there the following words: "With the author's compliments" (*hommages*).

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THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

LATIN AUTHORS.

Examiners : { W. DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

Translate :

Ex his omnibus judicat rebus, quanto cum periculo et quanta cum virtute res sint administratae: Ciceronem pro ejus merito legionemque collaudat; centuriones singillatim tribunosque militum appellat, quorum egregiam fuisse virtutem testimonio Ciceronis cognoverat. De casu Sabini et Cottae certius ex captivis cognoscit. Postero die contione habita rem gestam proponit, milites consolatur et confirmat: quod detrimentum culpa et temeritate legati sit acceptum, hoc aequiore animo ferendum docet, quod, beneficio deorum immortalium et virtute eorum expiato incommodo, neque hostibus diutina laetatio neque ipsis longior dolor relinquatur.

1. Explain the mood of *sint administratae*, *ferendum*, *relinquatur*, and the case of *hoc* and *animo*.

2. (a) *His omnibus rebus, legati, ipsis*. Who or what is meant?

(b) What would *eorum* become if the passage were turned into the direct form?

3. Mark the quantity of the vowels enclosed in brackets:—*l(e)gionem*, *egr(e)giam*, *capt(i)vis*, *cons(o)latur*, *l(e)gati*, *diut(i)na*, *d(o)lor*.

4. Draw a map of Gaul, showing the position of the three winter-camps attacked and of the tribes that attacked them.

[OVER.]

B.

Translate :

Multum cum in omnibus rebus, tum in re militari potest fortuna. Nam sicut magno accidit casu, ut in ipsum incautum etiam atque imparatum incideret, priusque ejus adventus ab omnibus videretur, quam fama ac nuntius afferretur, sic magnae fuit fortunae, omni militari instrumento, quod circum se habebat, erepto, redis equisque comprehensis, ipsum effugere mortem. Sed hoc quoque factum est, quod aedificio circumdato silva, ut sunt fere domicilia Gallorum, qui vitandi aestus causa plerumque silvarum ac fluminum petunt propinquitates, comites familiaresque ejus angusto in loco paulisper equitum nostrorum vim sustinuerunt.

5. Give the tense, mood and voice, the principal parts, and explain the syntax of: *incideret, afferretur, erepto, effugere, vitandi*.

6. What does Caesar tell us of (a) the difference in origin and customs between the Britons of the coast and the interior, (b) the holding of land among the Germans?

C.

Translate :

(a) In somnis, ecce, ante oculos maestissimus Hector
Visus adesse mihi, largosque effundere fletus;
Raptatus bigis, ut quondam, aterque cruento
Pulvere, perque pedes trajectus lora tumentes.
Hei mihi, qualis erat! quantum mutatus ab illo
Hectore, qui redit exuvias indutus Achilli,
Vel Danaum Phrygios jaculatus puppibus ignes!

(b) Mene efferre pedem, genitor, te posse relicto
Sperasti? tantumque nefas patrio excidit ore?
Si nihil ex tanta Superis placet urbe relinqui,
Et sedet hoc animo, perituraeque addere Trojae
Teque tuosque juvat, patet isti janua leto;
Jamque aderit multo Priami de sanguine Pyrrhus,
Natum ante ora patris, patrem qui obtruncat ad aras.

7. Give the nominative and genitive singular and the gender of: *pulvere, pedes* (in a), *ore, sanguine* (in b).

8. Explain the case construction of *lora* and *puppibus*, and the tense of *redit* (in a).

9. Scan the fourth and the last line of extract (b).

10. Explain the references in *raptatus bigis* and *redit exuvias indutus Achilli* in extract (a), and the last line of extract (b).

D.

Translate :

Pompeius, qui castra in colle habebat, ad infimas radices montis aciem instruebat, semper, ut videbatur, exspectans, si iniquis locis Caesar se subjiceret. Caesar nulla ratione ad pugnam elici posse Pompeium existimans, hanc sibi commodissimam belli rationem judicavit, uti castra ex eo loco moveret et insolitum ad laborem Pompei exercitum cotidianis itineribus defatigaret. His constitutis rebus, signo jam profectionis dato animadversum est extra cotidianam consuetudinem longius a vallo esse aciem Pompei progressam, ut non iniquo loco posse dimicari videretur. Tunc Caesar apud suos, 'Differendum est,' inquit, 'iter in praesentia nobis et de proelio cogitandum. Animo sinus ad dimicandum parati: non facile occasionem postea reperiemus;' confestimque expeditas copias educit.

radix - - - root, spur.
subjicio - - - expose.
insolitus - - - unaccustomed.

signum - - - signal.
différo - - - put off.

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LATIN GRAMMAR AND COMPOSITION.

Examiners : { W. DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

1. Write the Latin for *greatest; best; greatly; certain things; at midday; as easily as possible; that it might be taken; that it might be done; he will be able; they used to go.*

2. Translate into Latin:

- (a) It was impossible for Caesar to accept the terms.
- (b) You ought never to have promised to reward (*praemiis afficere*) the soldiers.
- (c) The soldiers were informed that the camp would be attacked at day-break.
- (d) The tenth legion was not far from capturing the standards of the enemy.

3. Translate into Latin:

- (a) On the news of the defeat, I was persuaded to take up arms under the leadership of Pompeius.
- (b) Whenever Caesar saw his men hard pressed, he would at once send them assistance.
- (c) If Napoleon throws all his forces across the river Rhine, I am afraid that no one will be able to resist his advance.

4. Translate into Latin:

The spring had not yet passed, when the Roman armament sailed for Britain. Caesar took with him five legions and an equal (*par*) number of cavalry, the usefulness of which had been

[OVER.]

proved in the late expedition. Three legions were left under Labienus, to provide for the security of Gaul. The landing was effected without opposition at the same spot as in the preceding summer: and Caesar, leaving ten cohorts to protect his naval station, repaired with the main body to a spot not far from the shore, where he constructed a camp to which he might retreat in case of defeat. This, it is thought, is the foundation of the famous (*celeber*) station of Rutupiae, whose ruins attest to this day the greatness of Roman military works.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

GERMAN AUTHORS.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.

Translate into English:

1. Da brausete aber einmal just im bedenklichsten Zeitpunkt das wilde Meer der Kinder in die Halle. Jetzt war alle Mühe vernichtet, Thasso fuhr wie besessen zwischen die Kinder und dann zwischen die Beine der Käufer, als wolle er die verhaltene Lust nun doppelt zügellos genießen. Den Kindern bekam's übel. Mit furchtbarem Schelten wurden sie hinauf zur Mutter geschickt und die beiden Knaben schon anderen Tages dem Schulmeister zur schärferen Zucht übergeben. Auch das Lungen und Balgen auf der Gasse ward ihnen strengstens untersagt. „Sie haben den Hund zu tausend Unarten verführt,“ meinte Meister Michwin, „und wie kann man überhaupt umtobt von so wilden Kindern einen jungen Hund erziehen?“ Er beschloß von nun an seinen bösen Rangen den Daumen scharf aufs Auge zu drücken, damit der Hund Ruhe habe und unverführt bleibe,

2. Michael wollte bescheiden wieder auf seinen Platz zurückgehen, aber die andern duldeten das nicht; jeder wollte ihn ansprechen, beloben, seinen Rat hören: der Leimsieder war mit einem Male der Mann der Volksgunst geworden, obgleich sich doch alle vor ihm hätten schämen sollen, als vor ihrem leibhaften bösen Gewissen, welches ihnen wie ein Spiegel, nur im verkehrten Bild, die eigenen Mängel vorhielt. Keiner zwar zupfte sich an der eigenen Nase, sondern ein jeder seinen Nebenmann, und es gab ein babylonisches Gewirr, in welchem das Lob des Schmieds mit den gegenseitigen Vorwürfen der einzelnen zusammenfloß.

Nun fand sich's auch urplötzlich, daß es in der Rüstkammer fehle und im Proviantgewölbe; denn alle hatten geredet, keiner gerüstet, alle gezechet, keiner gehandelt, den Leimsieder ausgenommen, der sein Haus bestellt hatte für jeden Fall, während er ganz still seinem Tagewerk und seiner Liebshaft nachging.

3. Und stille wird's über dem Wasserschlund,
In der Tiefe nur brauset es hohl,
Und bebend hört man von Mund zu Mund:

[OVER.]

„Hochherziger Jüngling, fahre wohl!“
Und hohler und hohler hört man's heulen,
Und es harret noch mit bangem, mit schrecklichem Weilen.

B.

Translate into English :

Elsbet war kaum dreizehn Jahre alt; aber die Mutter hatte frühzeitig das Mädchen zu allen Hausgeschäften angehalten, und da sie eine Freude hatte, im Haus herumzuschaffen und der schwächlichen Mutter gern helfen wollte, so hatte sie gelernt, alles geschickt anzugreifen.

Recht eifrig war sie, als sie den alten Topf ohne Henkel, der am Boden lag, mit Wasser füllte und zum Feuer rückte und sich jetzt umwandte nach dem alten Mann.

„Aber Ihr seht so bleich aus und so schwach! Euch friert's," sagte sie mitleidig. „Da liegt ja so ein alter brauner Mantel, in den wickelt Euch ein, zu schön ist er nicht dazu," fügte sie mit Lachen hinzu und bedeckte ihn mit dem groben Kleidungsstück; „vielleicht wird's doch noch warm da mit dem miserablen Holz."

Er stiesz ihre Hand zurück und sagte ohne Zorn, aber auch ohne Freundlichkeit: „Es friert mich nicht, geh' heim!"

„Will schon gehen," sagte Elsbet gutmütig und fand noch ein Geschirr auf, das einer zerbrochnen Schüssel gleichsah; darein schüttete sie etwas von dem gewärmten Wasser. „Jetzt müssen wir nur das garstige Blut wegwaschen. Ist kein Schwamm hier? Nun, dann musz ich meinen Schurzzipfel nehmen."

Der alte Poppel muszte wohl recht schwach sein; denn er liesz sich's ganz gutwillig gefallen, das die Kleine ihm sachte die blutige Stirn und das Gesicht abwusch; ihre weichen Händchen glitten ganz leicht und kühl wie Schneeflocken über die dürre, runzlige Haut des Alten. Aber das Blut begann wieder zu fliesen nach dem Abwaschen. „Wenn ich nur Spinnweben hätte!" sagte Elsbet; es fiel ihr ein, dasz die Mutter das für das Beste hielt, um Blut zu stillen. Dieser bescheidene Wunsch war auch sehr leicht zu erfüllen in dem alten Rauchloch von einer Hütte. Die Spinnweben hingen herum wie Vorhänge. Bald hatte Elsbet, die sich nicht fürchtete vor Spinnen, von dem Gewebe heruntergestreift und das Blut auf's beste gestillt.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND
UNIVERSITY PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.
GERMAN GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE.—*The extract is given merely as a basis for the questions which follow, and is not to be translated.*

So verlief die erste Woche. Da geschah es eines Tages, dass die beiden jungen Leute mit dem Oheim im Schlossgarten lustwandelten. Die Pracht der sonnenbestrahlten Schneelandschaft und der herzerquickende Odem der reinen Winterluft gab den Gemütern höheren Schwung; der Leibmedicus fühlte sich mit einem Male so stark und entschlossen, dass er seiner Braut die offenste Beichte hätte ablegen und doch nicht vor Scham in die Erde sinken mögen, wäre nur der Oheim nicht zugegen gewesen, und er nahm sich mannhaft vor, bei der Heimkehr in den unbewachten Minuten der Dämmerstunde die volle und ganze Wahrheit ehrlich zu bekennen. Aus diesen Gedanken ward er plötzlich aufgestört durch das Erscheinen des Fürsten; auf schmalem Pfade ging er an ihnen vorüber, und sein Auge weilte bei der Gruppe mit langem forschenden Blick. Nachdem sie die verschlungenen Gartenpfade eine Strecke weiter gewandelt, begegnete ihnen abermals der Fürst, und fast deuchte es dem Doktor, er habe ihnen geflissentlich den Weg abgeschnitten, um sie noch schärfer als vorher zu betrachten. Ja beim Ausgang aus dem Garten sahen sie ihn zum dritten Male etwas seitab an der Schlosstreppe.

1. Give the genitive singular and nominative plural of
Luft, Braut, Wahrheit, Doktor, Garten, Schwung. [OVER.]

2. Give the German for : *a winding garden path, winding garden paths, alongside a long garden path, the long twilight hours, both the prince and the uncle.*

3. Give the comparative and superlative of *jung, stark, voll, schmal.*

4. (a) Give the third person singular present indicative of *verlieh, geschah, entschlossen, nahm, ward, abgeschnitten, sahen.*

(b) Give in full the present indicative of *mögen* and *sein.*

5. Translate into German :

(a) What has happened ?

(b) Where did you meet him ?

(c) Has he gone to town ?

(d) Did he confess the truth ?

(e) Have you seen her father ?

6. Classify the prepositions in the extract according to the cases they govern, giving the numbers of the lines in which they occur ; also give an additional example, where necessary, to clearly illustrate your answer.

B.—(Composition.)

7. Translate into German :

(a) There are some pretty flowers in the woods in spring-time.

(b) There was a good deal of snow on the roofs in January.

(c) Where are your books ? I have mine here.

(d) The daughters of our neighbour have fine dresses and pretty shoes.

(e) This large black hen lays an egg every day.

8. Translate into German :

(a) Those houses are very small and pretty cold in the winter.

(b) There are a good many trees in Mr. Smith's fields.

(c) Have you seen my father this morning ? No, but I did yesterday.

(d) Where is your little brother going with that basket ?
Home ?

(e) Is not that little girl with long golden hair very pretty ?

9. Translate into German :

- (a) At what time does the evening train leave Toronto for Hamilton?
- (b) There are two every day except on Sunday, when there is only one.
- (c) One leaves at a quarter to seven, the other at ten minutes past nine.
- (d) The picture is hanging on the wall and the books are on the table.
- (e) Please go into that little room and bring me my shoes. They are under the table.

10. Translate into German :

The winter of the year 1895 was very cold and a great deal of snow fell in January and February. Old men said they had seldom seen so much snow and of course boys had never. But schoolboys are not afraid of snow and cold weather for then they have plenty of fun sleigh-riding (*Schlittenfahren*) and there is always ice for skating. But sometimes boys get their ears frozen and that is not so pleasant. Poor people do not like the cold weather because it is hard for them to get money enough to buy coal and wood. Oftentimes they have poor houses and wretched (*ärmlich*) clothes and then it is very hard for them to live and keep warm. It does not seem so bad to be poor in the summer, because the weather is warm and people do not need so many clothes. Besides, everything is growing in the gardens and fields and it is easier to get something to eat.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY
PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP
EXAMINATION.

GREEK AUTHORS.

Examiners : { WILLIAM DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

Translate :

Τῇ δὲ ὑστεραία ἀπήεσαν οἱ Ἕλληνες, ἔχοντες τὰ ἐπιτήδεια. Ἐπεὶ δὲ τὴν κατάβασιν ἐφοβοῦντο τὴν εἰς Τραπεζοῦντα, πρηνὴς γὰρ ἦν καὶ στενὴ, ψευδενέδραν ἐποιήσαντο. Καὶ ἀνὴρ, Μυσὸς τὸ γένος καὶ τοῦνομα τοῦτο ἔχων, τῶν Κρητῶν λαβὼν δέκα, ἔμενεν ἐν λασίῳ χωρίῳ καὶ προσεποιεῖτο τοὺς πολεμίους πειρᾶσθαι λανθάνειν· αἱ δὲ πέλται αὐτῶν ἄλλοτε καὶ ἄλλοτε διεφαίνοντο χαλκαῖ οὔσαι. Οἱ μὲν οὖν πολέμιοι ταῦτα διορῶντες ἐφοβοῦντο ὡς ἐνέδραν οὔσαν· ἡ δὲ στρατιὰ ἐν τούτῳ κατέβαινεν. Ἐπεὶ δὲ ἐδόκει ἤδη ἱκανὸν ὑπεληλυθέναι τῷ Μυσῷ, ἐσήμηνε φεύγειν ἀνὰ κράτος· καὶ ὃς ἐξαναστὰς φεύγει καὶ οἱ σὺν αὐτῷ. Καὶ οἱ μὲν ἄλλοι Κρήτες, ἀλίσκεσθαι γὰρ ἔφασαν τῷ δρόμῳ, ἐκπεσόντες ἐκ τῆς ὁδοῦ εἰς ὕλην, κατὰ τὰς νάπας καλινδούμενοι ἐσώθησαν· ὁ Μυσὸς δὲ κατὰ τὴν ὁδὸν φεύγων ἐβόα βοηθεῖν· καὶ ἐβοήθησαν αὐτῷ καὶ ἀνέλαβον τετρωμένον. Καὶ αὐτοὶ ἐπὶ πόδα ἀνεχώρουν βαλλόμενοι οἱ βοηθήσαντες καὶ ἀντιτοξεύοντές τινες τῶν Κρητῶν. Οὕτως ἀφίκοντο ἐπὶ τὸ στρατόπεδον πάντες σῶοι ὄντες.

XENOPHON, *Anabasis*, V.

1. State the mood, tense, and voice, and give the principal parts of ὑπεληλυθέναι, ἐσήμηνε, ἐξαναστὰς, ἐκπεσόντες, τετρωμένον, ἀφίκοντο.

2. Write in uncontracted form ἐφοβοῦντο, τοῦνομα, ἐδόκει, ἐβόα.

(OVER.)

3. Supply (in Greek) the words omitted after ὑστεραία, ἐν τούτῳ, and οἱ σὺν αὐτῷ. Give (in Greek) the "direct speech" (word actually used) for ἀλίσκεσθαι, and state when the subject of the infinitive in indirect speech is omitted.

4. In what way are the following places connected with Xenophon: Athens, Cynaxa, Trapezus, Scyllus, Mantinea?

B.

Translate :

“ Ἀλλ’ οὐ μοι Τρώων τόσσον μέλει ἄλγος ὀπίσσω,
 Οὐτ’ αὐτῆς Ἑκάβης οὔτε Πριάμοιο ἄνακτος
 Οὔτε κασιγνήτων, οἳ κεν πολέες τε καὶ ἐσθλοὶ
 Ἐν κονίησι πέσοιεν ὑπ’ ἀνδράσι δυσμενέεσσιν,
 Ὅσσον σεῦ, ὅτε κέν τις Ἀχαιῶν χαλκοχιτώνων
 Δακρυόεσσαν ἄγεται, ἐλεύθερον ἡμᾶρ ἀπούρας.
 Καί κεν ἐν Ἀργεὶ ἐοῦσα πρὸς ἄλλης ἰστὸν ὑφαίνοις,
 Καί κεν ὕδωρ φορέοις Μεσσηίδος ἢ Ὑπερείης
 Πόλλ’ ἀεκαζομένη, κρατερὴ δ’ ἐπικείσεται ἀνάγκη.
 Καί ποτέ τις εἶπησιν ἰδὼν κατὰ δάκρυ χέουσας,
 “ Ἐκτορος ἦδε γυνή, ὃς ἀριστεύεσκε μάχεσθαι
 Τρώων ἵπποδάμων, ὅτε Ἴλιον ἀμφεμάχοντο.”
 Ὡς ποτέ τις ἐρέει· σοὶ δ’ αὖ νέον ἔσσεται ἄλγος
 Χήτεϊ τοιοῦδ’ ἀνδρὸς, ἀμύνειν δούλιον ἡμᾶρ.
 Ἀλλὰ με τεθνηῶτα χυτὴ κατὰ γαῖα καλύπτει
 Πρὶν γ’ ἔτι σῆς τε βοῆς σοῦ θ’ ἐλκηθμοῖο πυθέσθαι.”

HOMER, *Iliad*, VI.

5. Who is the speaker? Who is addressed? Scan the first two lines of the extract.

6. Give Attic forms for κέν, πολέες, κονίησι, σεῦ, ἐοῦσα, εἶπησιν, ἀριστεύεσκε, ἐρέει, ἔσσεται.

7. Write a grammatical note on ἄλγος ὀπίσσω, πέσοιεν, ἄγεται (mood and voice), κατὰ.

8. Give the literal meaning of the following epithets, and state to what each is applied and why: δολιχόσκιος, ἡπιόδωρος, ρεία ζῶντες, ῥοδοδάκτυλος, εἰλίποδες.

C.

Translate :

Ἀκούσας ταῦτα ὁ Σεύθης εἶπεν, ὅτι οὐδενὶ ἂν ἀπιστήσειεν Ἀθηναίων· καὶ γὰρ ὅτι συγγενεῖς εἶεν εἰδέναι, καὶ φίλους αὐτοὺς ἔφη νομίζειν. Μετὰ ταῦτα δ’ ἐπεὶ εἰσῆλθον οὓς ἔδει, πρῶτον Ξενοφῶν ἐπήρετο Σεύθην, ὃ τι (for what) δέοιτο χρῆσθαι τῇ στρατιᾷ. Ὁ δὲ εἶπεν ὧδε· “ Μαισάδης ἦν πατήρ μοι, ἐκείνου δ’ ἦν ἀρχὴ Θυνοὶ.

Ἐκ ταύτης οὖν τῆς χώρας, ἐπεὶ τὰ πράγματα ἐνόησεν, ἐκπεσὼν ὁ πατήρ αὐτὸς μὲν ἀποθνήσκει νόσῳ, ἐγὼ δ' ἐξετράφην ὀρφανὸς παρὰ Μηδόκῳ τῷ νῦν βασιλεῖ. Ἐπεὶ δὲ νεανίσκος ἐγενόμην, οὐκ ἐδυνάμην ζῆν εἰς ἀλλοτρίαν τράπεζαν ἀποβλέπων· καὶ ἦτουν αὐτὸν δοῦναί μοι ὅσους δυνατὸς εἶη ἄνδρας, ὅπως καὶ τοὺς ἐκβαλόντας ἡμᾶς, εἴ τι δυναίμην, κακὸν ποιόην. Καὶ νῦν ἐγὼ ζῶ τούτους ἔχων, ληϊζόμενος τὴν ἐμαυτοῦ πατρώαν χώραν. Εἰ δέ μοι ὑμεῖς παραγένοισθε, οἶμαι ἂν σὺν τοῖς θεοῖς ῥαδίως ἀπολαβεῖν τὴν ἀρχήν."

ΞΕΝΟΦΩΝ, *Anabasis*, VII.

ἀπιστέω, *disbelieve*.

συγγενής, *kinsman*.

τὰ πράγματα, *state affairs*.

νοσέω, *be in disorder*.

ἐκπίπτω, *be banished*.

ἐκτρέφω, *rear*.

νεανίσκος, *young man*.

ἀλλότριος, *another's*.

Education Department, Ontario

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL JUNIOR LEAVING AND UNIVERSITY
PASS MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP
EXAMINATION.

GREEK GRAMMAR AND COMPOSITION.

Examiners : { WILLIAM DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

1. Give the nominative and genitive singular of πόλεις, μάντιν, αἶγας, βελῶν, ἔω, τάδε, ταῦτα, ἡμῖν, ὅτω, οἷς.

2. Give the first person singular present indicative of εἶναι, ἵεναι, ἴστε, εἶχον, ἄξω, μέιναι, ἥρηνται, ἀνέωγον, ἑωρακότες, ἐμβιβῶ are formed.

3. Write down the Greek for *worse, least, greatest, most ; these men ; the same things ; better men than your fathers ; the rest were taken ; do not tell them.*

4. Translate into Greek any *four* of the following sentences :

(a) He considers that this city is hostile to himself.

(b) They gave him money and ships ; but the ships were lost, crews and all.

(c) They used to go to him to inquire about virtue.

(d) They went away that they might not see us.

(e) He kept calling out (βοάω) and trying (ἐπιχειρέω) to say that it was just (δίκαιος).

(f) He knew that we were not without experience (ἄπειρος), because of our always being present (use διά and the infinitive).

(g) Ask (ἐρωτάω) the man yourself not to go away till (πρὶν ἄν) he hears what the matter is.

(h) I must say that some of us were afraid (δείδω) that madness (λύττα) had fallen upon them (ἐμπίπτω).

(OVER.)

5. Translate into Greek :

One of the captains, however, happened to be present and he rose and spoke as follows : " I hear, soldiers, that our general intends to found (κατοικίζω) a city here, thinking that in this way he will acquire (προσκτάομαι) power and territory (χώρα) for Hellas and a great name for himself. What do you intend to do about it ? If I saw you willing to remain, I should keep silence ; but, as I know you are unwilling, I have spoken, while prevention is still possible " (use ἔξεστι and an infinitive).

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

ENGLISH GRAMMAR, PHILOLOGY, RHE- TORIC AND PROSODY.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

A.

The queen, his mother,
Lives almost by his looks ; and for myself,—
My virtue, or my plague, be it either which,—
She's so conjunctive to my life and soul,
That as the star moves not but in his sphere,
I could not but by her. The other motive
Why to a public count I might not go,
Is the great love the general gender bear him.

5

1. Analyse the first six lines ("The queen, . . . her") so as to show the various clauses therein and their relations to one another.

2. State the grammatical value and relation of

"almost" (line 2),	"his" (line 5),
"for myself" (line 2),	"by her" (line 6),
"be" (line 3),	"go" (line 7),
"but" (line 5),	"him" (line 8).

3. (a) Distinguish clearly the different grammatical uses of the compound pronouns ending in *self*. Give examples.

(b) Give the origin and history of *myself*, *himself*, *yourself*, *themselves*.

B.

4. (a) Classify minutely the consonants of the English alphabet.

(b) To what letters in Latin do the following English letters generally correspond in words derived from a common source:—
b, p, t, k, f? Give examples.

[OVER.]

5. "Changes in the meaning of words are due to a variety of causes."

Mention, with examples, at least three of these causes.

6. (a) Distinguish between Presentive (Notional) and Symbolic (Relational) words.

(b) Trace the growth of symbolism in the following:—*thing, shall, there*.

7. (a) Give a list of English words denoting title or official position which contain the root-idea of *old age*; and state the origin, root meaning, and present meaning of each.

(b) State the origin and root meaning of any five of the following:—*reeve, sheriff, mayor, judge, magistrate, policeman, colonel, lieutenant, commodore, admiral*.

8. Account for the prevalence of the following illiterate and colloquial expressions:—

(a) the double negative,

(b) the use of *seen* and *done* as preterites,

(c) the elision of final *g* in words ending in *ing*,

(d) the use of *was* with a plural subject,

(e) the use of the flat adverb, *e.g.* "He writes good,"

(f) *sparrowgrass* for *asparagus*.

C.

(i) Here is wisdom. Here are the principles on which nations are to be governed. Rose-bushes and poor-rates, rather than steam-engines and independence. Mortality and cottages with weather-stains rather than health and long life with edifices which time cannot mellow. We are told that our age has invented atrocities beyond the imagination of our fathers; that society has been brought into a state compared with which extermination would be a blessing; and all because the dwellings of cotton-spinners are naked and rectangular. Mr. Southey has found out a way, he tells us, in which the effects of manufactures and agriculture may be compared, and what is this way? To stand on a hill, to look at a cottage and a factory, and to see which is the prettier. Does Mr. Southey think that the body of the English peasantry live, or ever lived, in substantial or ornamental cottages, with box hedges, flower-gardens, bee-hives, and orchards? If not, what is his parallel worth?

(ii) It was not, however, destined that she or her child should inhabit that little garret. We were to leave our lodgings on Monday morning; but on Saturday evening the child was seized with convulsions, and all Sunday the mother watched and prayed for it; but it pleased God to take the innocent infant from us, and on Sunday, at midnight, it lay a corpse in its mother's bosom. Amen We have other children, happy and well,

now round about us, and from the father's heart, the memory of this little thing has almost faded ; but I do believe that every day of her life the mother thinks of the first-born that was with her for so short a while : many and many a time has she taken her daughters to the grave, in Saint Bride's, where he lies buried ; and she wears still at her neck a little, little lock of gold hair, which she took from the head of the infant as he lay smiling in his coffin. It has happened to me to forget the child's birth day, but to her never ; and often, in the midst of common talk, comes something that shows she is thinking of the child still,—some simple allusion that is to me inexpressibly affecting.

9. (a) What quality or qualities of style are exhibited in these extracts ?

(b) Show by what devices the rhetorical effects are produced.

(c) Write a brief note on the vocabulary of the second extract.

D.

(i) The curfew tolls the knell of parting day,
 The lowing herd wind slowly o'er the lea,
 The ploughman homeward plods his weary way,
 And leaves the world to darkness and to me.

(ii) But the city, oh the city -- the square with the houses ! Why ?
 They are stone-faced, white as a curd, there's something to take
 the eye !
 Houses in four straight lines, not a single front awry ;
 You watch who crosses and gossips, who saunters, who hurries by ;
 Green blinds, as a matter of course, to draw when the sun gets
 high ;
 And the shops with fanciful signs which are painted properly.

10. State the main difference in the impression produced by the versification in passages (i) and (ii), and point out in detail the causes of this difference.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

ALGEBRA.

Examiners: $\left\{ \begin{array}{l} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{array} \right.$

1. (a) Find the sum of the first n terms of an Arithmetical Progression of which the p th term is q , and the r th term is s .

(b) How many terms of the series $3 + 5 + 7 + \dots$ must be taken to give the sum 2703? Account for the negative root.

2. (a) Show that four quantities a, b, c, d are proportionals, if $pc \begin{matrix} > \\ < \end{matrix} qd$ according as $pa \begin{matrix} > \\ < \end{matrix} qb$, p and q being any positive integers.

(b) If $(a^2 + b^2 + c^2)(x^2 + y^2 + z^2) = (ax + by + cz)^2$, prove that $\frac{x}{a} = \frac{y}{b} = \frac{z}{c}$, the letters denoting real quantities.

3. Solve:—

(a) $3x^2 - 14x - 32849 = 0$,

(b) $x^2 + 2yz = 13$,

$y^2 + 2zx = 10$,

$z^2 + 2xy = 13$.

4. (a) If $a_1, a_2, a_3, \dots, a_n$ are n consecutive terms of an A. P., show that

$$\frac{1}{a_1 a_2} + \frac{1}{a_2 a_3} + \frac{1}{a_3 a_4} + \dots + \frac{1}{a_{n-1} a_n} = \frac{n-1}{a_1 a_n}.$$

(b) Show that the harmonical mean between two unequal positive quantities is less than their geometrical mean.

[OVER.]

5. (a) Show that a quadratic function of x can be resolved into linear factors in only one way.

(b) Factor $(b + 2c - 3a)^3 + (c + 2a - 3b)^3 + (a + 2b - 3c)^3$.

(c) Eliminate x from

$$ax^3 + bx^2 + c = 0,$$

$$a_1x^3 + b_1x^2 + c_1 = 0.$$

6. (a) Find the number of combinations of n different things taken r at a time.

(b) Find the "total number of combinations" of n things, (i) when the things are all unlike, (ii) when p of the things are alike, and the rest unlike.

(c) In how many ways can 10 boys and 10 girls form a ring by joining hands, when each person may face either inwards or outwards and no two boys are adjacent?

7. (a) If $f(x) \times f(y) = f(x + y)$, for all values of x and y , prove that $f\left(\frac{p}{q}\right) = q\sqrt[q]{f(p)}$; and $f(-n) = \{f(n)\}^{-1}$.

(b) Find the coefficient of x^n in $\left(\frac{1+2x}{1-2x}\right)^2$.

(c) Show that the sum of the squares of the coefficients of the expansion $(1+x)^n$ is $\frac{|2n|}{\{|n|\}^2}$.

8. What sum must be paid for an annuity of a dollars to continue b years, the first payment of the annuity to be made at the end of c years, the rate of interest being r per unit per annum?

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

ENGLISH POETICAL LITERATURE.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

NOTE.—*Candidates for Matriculation will take sections A and B. Candidates for Senior Leaving Examination will take sections B and C.*

A.

1. Point out in detail how the poet makes it seem natural that Bolingbroke should be victorious in his contest with Richard.

2. Describe concisely the First Scene of the Second Act (the one which includes the death of Gaunt), and show what it contributes to the development of the play.

B.

Enter Gaunt and Duchess of Gloster.

Gaunt. Alas! the part I had in Gloster's blood
Doth more solicit me than your exclams,
To stir against the butchers of his life.
But since correction lieth in those hands
Which made the fault that we cannot correct, 5
Put we our quarrel to the will of heaven,
Who, when they see the hours ripe on earth,
Will rain hot vengeance on offenders' heads.

Duchess. Finds brotherhood in thee no sharper spur?
Hath love in thy old blood no living fire? 10
Edward's seven sons, whereof thyself art one,
Were as seven vials of his sacred blood,
Or seven fair branches springing from one root.
Some of those seven are dried by nature's course,
Some of those branches by the Destinies cut; 15
But Thomas, my dear lord, my life, my Gloster,

[OVER.]

One vial full of Edward's sacred blood,
 One flourishing branch of his most royal root,
 Is crack'd, and all the precious liquor spilt,
 Is hack'd down, and his summer leaves all faded, 20
 By envy's hand and murther's bloody axe.
 Ah, Gaunt, his blood was thine! that bed, that womb,
 'That metal, that self-mould, that fashion'd thee,
 Made him a man; and though thou liv'st and breath'st,
 Yet art thou slain in him: thou dost consent 25
 In some large measure to thy father's death,
 In that thou see'st thy wretched brother die,
 Who was the model of thy father's life.
 Call it not patience, Gaunt; it is despair:
 In suffering thus thy brother to be slaughtered, 30
 Thou show'st the naked pathway to thy life,
 Teaching stern murder how to butcher thee.
 That which in mean men we entitle patience,
 Is pale cold cowardice in nobler breasts.
 What shall I say? to safeguard thine own life, 35
 The best way is to venge my Gloster's death.
Gaunt. God's is the quarrel; for God's substitute,
 His deputy anointed in His sight,
 Hath caus'd his death; the which, if wrongfully,
 Let heaven revenge, for I may never lift 40
 An angry hand against His minister.
Duchess. Where, then, alas, may I complain myself?
Gaunt. To God, the widow's champion and defence.
Duchess. Why, then, I will. Farewell, old Gaunt. 45
 Thou go'st to Coventry, there to behold
 Our cousin Hereford and fell Mowbray fight.
 O, sit my husband's wrongs on Hereford's spear,
 That it may enter butcher Mowbray's breast!
 Or, if misfortune miss the first career,
 Be Mowbray's sins so heavy in his bosom 50
 That they may break his foaming courser's back,
 And throw the rider headlong in the lists,
 A caitiff recreant to my cousin Hereford!
 Farewell, old Gaunt, thy sometimes brother's wife
 With her companion grief must end her life. 55
Gaunt. Sister, farewell; I must to Coventry.
 As much good stay with thee, as go with me!

3. Point out what the above passage contributes to the development and understanding of the play.

4. (a) Point out the passage in the quotation which is particularly open to criticism as being unnatural and undramatic, and show why it is so.

(b) Express clearly and concisely, in your own words, the meaning of lines 4 and 5.

(c) What theory of government is assumed within the limits of the quotation?

5. Discuss “they” (line 7), and the versification of line 44. Explain fully “model” (line 28), “naked” (line 31), “if misfortune miss the first career” (line 49), “thy sometimes brother’s wife” (line 54).

6. With regard to *six* of the following passages name the speaker, the person or persons addressed, and indicate the circumstances:—

- (a) How sour sweet music is
When time is broke and no proportion kept!
So is it with the music of men’s lives.
- (b) The purest treasure mortal times afford
Is spotless reputation.
- (c) I count myself in nothing else so happy
As in a soul remembering my good friends.
- (d) There is no virtue like necessity.
- (e) Well you deserve: they well deserve to have
That know the strong’st and surest way to get.
- (f) Within the hollow crown
That rounds the mortal temples of a king
Keeps death his court.
- (g) As in a theatre the eyes of men,
After a well-grac’d actor leaves the stage,
Are idly bent on him that enters next,
Thinking his prattle to be tedious.
- (h) I am sworn brother, sweet,
To grim necessity.

7. Show what peculiarities of Chaucer’s tastes and character may be gathered from the *Prologue*.

8. Explain the italicized words in the following:—

*Wel coude he fortunen the ascendent
Of his images for his pacient.*
He knew the cause of everiche maladye,
Were it of hoot or cold, or moiste, or drye,
And where engendred, *and of what humour;*
He was a verray parfit practisour.
The cause yknowe, and of his harm the rote,
Anon he yaf the seke man his *bote*.
Ful redy hadde he his apothecaries
To sende him drogges, and his *letuaries*
For ech of hem made other for to winne;
Hir frendschipe nas nat newe to biginne.

C.

When in disgrace with fortune and men's eyes,
I all alone beweepe my outcast state
And trouble deaf heaven with my bootless cries
And look upon myself and curse my fate,
Wishing me like to one more rich in hope,
Featur'd like him, like him with friends possess'd,
Desiring this man's art and that man's scope,
With what I most enjoy contented least ;
Yet in these thoughts myself almost despising,
Haply I think on thee, and then my state,
Like to the lark at break of day arising
From sullen earth, sings hymns at heaven's gate ;
For thy sweet love remember'd such wealth brings
That then I scorn to change my state with kings.

9. Describe the verse-structure of this poem, and in how far it corresponds to, and enforces the thought-structure.

10. Describe, in your own words, the circumstances and condition of mind of the speaker as revealed in the poem.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

EUCLID.

Examiners: $\left\{ \begin{array}{l} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{array} \right.$

1. The three medians of a triangle, taken in both length and direction, can form a triangle; and the area of the new triangle is three-fourths that of the original.

2. P is a fixed point and L is a fixed line not containing P . PA and PB are perpendicular to one another and meet L in A and B respectively. Show that the sum of the reciprocals of the squares on PA and PB is constant.

3. Draw a circle to pass through a given point and touch two given lines.

4. Show how to inscribe a circle in a triangle, and how to describe a circle about the same triangle. Euc. IV., 4 and 5.

5. (a) Describe a regular pentagon in a circle. Euc. IV., 11.

(b) Show that every diagonal of the pentagon is divided in extreme and mean ratio by another diagonal.

6. If two triangles have their three sides proportional they are equiangular (or similar), and have the equal angles opposite homologous sides in each. Euc. VI., 5.

7. Find a mean proportional between two given straight lines; and thence find a square equal to the sum of two given rectangles. Euc. VI., 13.

[OVER.]

8. Equiangular parallelograms are to each other as the rectangles contained by a pair of adjacent sides of each. Euc. VI., 23.

9. In a concyclic quadrilateral the sum of the rectangles on the sides taken in opposite pairs, is equal to the rectangle contained by the diagonals. Euc. VI., D, (Ptolemy's theorem).

10. $APBQ$ are four points in line such that $AP : PB = AQ : BQ$. If C be the middle point of AB , show that the square on AB is equal to four times the rectangle contained by CP and CQ .

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

HISTORY AND GEOGRAPHY.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

1. Write an account of the New Learning, and the connection therewith of Colet, Erasmus, Warham and More. Show on what grounds the "Utopia" may claim to be considered the "typical book of the Revival."

2. "It is only by thoroughly realising the temper of the nation on religious and civil subjects, and the temper of the King, that we can understand the long Parliamentary conflict which occupied the whole of James's reign. But to make its details intelligible we must briefly review the relations between the two Houses and the Crown."

Sketch the history of the conflict referred to in this extract, first describing clearly and concisely the 'relations', the 'temper of the nation', and the 'temper of the King'. Give also in connection with the foregoing a brief account of the proceedings which led to the dismissal of Coke.

3. "He was the first English statesman who discovered and applied to the political circumstances around him what may be called the doctrine of constitutional proportion."

Sketch briefly the life and character of the statesman who is the subject of the above remark, and give a clear account of the 'circumstances' and the 'doctrine' therein referred to.

4. Describe the growth of the freedom of the Press during the period prescribed for this examination (1492—1688), noting any publications which had the effect of retarding, or which were meant to advance, the cause of such freedom.

[OVER.]

5. Describe the course of affairs in England from the "Invitation" to the calling of the "Convention". What part did the English Aristocracy play in the revolution of 1688?

6. Give a brief account of any *three* of the following, with an estimate of their influence on the history of their times:—Bacon, Burleigh, Clarendon, Ashley Cooper, Wentworth, Laud, Monmouth, Hobbes, Locke, Jeremy Taylor.

7. Locate, and write brief historical notes on any *ten* of the following:—

- | | |
|------------------|-----------------|
| (a) Antwerp, | (k) Lyme, |
| (b) Breda, | (l) Naseby, |
| (c) Cadiz, | (m) Nottingham, |
| (d) Calais, | (n) Rochelle, |
| (e) Carisbrook, | (o) Santa Cruz, |
| (f) Drogheda, | (p) Sedgemoor, |
| (g) Dunbar, | (q) Taunton, |
| (h) Dunkirk, | (r) Torbay, |
| (i) Fotheringay, | (s) Worcester, |
| (i) Loch Leven, | (t) Zutphen. |

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

TRIGONOMETRY.

Examiners: $\begin{cases} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{cases}$

1. (a) Define those units of measurement called respectively the degree, the grade, the radian ; and show the relation of each to two right angles.

(b) The sum of the measure of a certain angle in degrees and twice its measure in radians is $23\frac{2}{7}$; find its measure in degrees ($\pi = \frac{22}{7}$).

2. (a) Express in terms of its cosine the other trigonometrical functions of the angle x .

(b) Given $2 \sin^2 45^\circ = 1$ and $\sin 30^\circ = \frac{1}{2}$; find $\tan 15^\circ$.

3. (a) Prove geometrically that

$$\cos(A-B) = \cos A \cos B + \sin A \sin B.$$

(b) If $\cos(A-C) \cos B = \cos(A-B+C)$, show that $\tan A$, $\tan B$ and $\tan C$ are in harmonical progression.

4. Prove the following identities :

$$(a) \quad \tan \frac{x}{2} = \frac{1 - \cos x}{\sin x}.$$

$$(b) \quad \cos A + \cos 3A + \cos 5A + \cos 7A = 4 \cos A \cos 2A \cos 4A.$$

$$(c) \quad \cos(A+B) - \sin(A-B) = 2 \sin\left(\frac{\pi}{4} - A\right) \cos\left(\frac{\pi}{4} - B\right).$$

[OVER.]

5. Define the logarithm of a number and prove

$$(a) \quad \log_a \sqrt{\frac{n}{m}} = \frac{1}{2} (\log_a n - \log_a m).$$

$$(b) \quad 6 \log_a \frac{2}{3} + 4 \log_a \frac{9}{10} + 2 \log_a \frac{25}{6} = 0.$$

6. In the triangle ABC , show that

$$(a) \quad \tan \frac{1}{2}(A - B) = \frac{a - b}{a + b} \cot \frac{C}{2}.$$

(b) $p = \frac{c \sin A \sin B}{\sin C}$, if p denote the perpendicular from C upon c .

7. From the point A on a plane the angular elevation of a tower on the same plane is β . From the point D which is c feet nearer the base of the tower the angular elevation is γ . Show that the height of the tower is

$$\frac{c}{\cot \beta - \cot \gamma}.$$

8. In any triangle, ABC , prove that

(a) $R = \frac{abc}{4\Delta} = \frac{c}{2 \sin C}$, where R is the radius of the circumcircle, and Δ is the area of the triangle.

$$(b) \quad \Delta = 2 R^2 \sin A \sin B \sin C.$$

9. At the foot of a mountain the elevation of its summit is 45° . Ascending the face of the mountain a mile on a slope of 15° , the elevation is found to be 60° . Find the height in

miles; given $\sin 15^\circ = \frac{\sqrt{3} - 1}{2\sqrt{2}}$, $\sin 30^\circ = \frac{1}{2}$.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

ENGLISH COMPOSITION.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

NOTE.—*The candidate will write on ONE, and only one, of the following themes:*

1. Japan.
2. The Future of Canada.
3. Navigators of Queen Elizabeth's Time.
4. Does Education unfit for Mechanical and Agricultural Pursuits?
5. Bolingbroke.
6. A Botanical Ramble in Spring.

(Any names of persons or places the candidate uses must be fictitious, not real names.)

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

FRENCH AUTHORS.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

Translate into English :

1. Les physionomies des deux enfants ne différait pas moins que leur costume. Celle du premier était délicate et distinguée ; l'œil d'un bleu limpide, la peau fine, les lèvres souriantes lui donnaient un charme d'innocence et de bonheur ; les traits du second, au contraire, avaient une certaine rudesse ; le regard était vif et mobile, le teint bruni, la bouche moins riante que narquoise ; tout indiquait l'intelligence aiguïée par une précoce expérience ; il marchait avec confiance au milieu des rues que les voitures sillonnaient, et suivait sans hésitation leurs mille détours.

J'appris de lui qu'il apportait tous les jours le dîner de son père, alors occupé sur la rive gauche de la Seine ; la responsabilité dont il était chargé l'avait rendu attentif et prudent. Il avait reçu ces dures mais puissantes leçons de la nécessité que rien n'égale, ni ne remplace. Malheureusement les besoins du pauvre ménage l'avaient forcé à négliger l'école, et il paraissait le regretter, car souvent il s'arrêtait devant les gravures et demandait à son compagnon de lui en lire les inscriptions.

2. Il habitait dans le faubourg une vieille maison où logeaient des ouvriers aussi pauvres que lui, mais moins abandonnés. Une seule de ses voisines vivait sans famille, dans une petite mansarde où pénétraient la pluie et le vent. C'était une jeune fille pâle, silencieuse, sans beauté, et que recommandait seulement sa misère résignée. On ne la voyait jamais adresser la parole à une autre femme ; aucun chant n'égayait sa mansarde. Enveloppée dans un morne abattement comme dans une sorte de linceul, elle travaillait sans ardeur et sans distraction. Sa langueur avait touché

[OVER.]

Maurice; il essaya de lui parler; elle répondit avec douceur, mais brièvement. Il était aisé de voir que son silence et sa solitude lui étaient plus chers que la bienveillance du petit bossu; il se le tint pour dit et redevint muet.

3. — Tu n'as peut-être jamais pensé à ce qu'est que la patrie, reprit-il, en me posant une main sur l'épaule; c'est tout ce qui t'entoure, tout ce qui t'a élevé et nourri, tout ce que tu as aimé! Cette campagne que tu vois, ces maisons, ces arbres, ces jeunes filles qui passent là en riant, c'est la patrie! Les lois qui te protègent, le pain qui paie ton travail, les paroles que tu échanges, la joie et la tristesse qui te viennent des hommes et des choses parmi lesquels tu vis, c'est la patrie! La petite chambre où tu as vu autrefois ta mère, les souvenirs qu'elle t'a laissés, la terre où elle repose, c'est la patrie! Figure-toi, mon fils, tes droits et tes devoirs, tes affections et tes besoins, tes souvenirs et ta reconnaissance, réunis tout ça sous un seul nom, et ce nom-là sera la patrie.

4. HENRIETTE, *qui a ouvert un journal*.—Tiens, papa qui est dans le journal!

PERRICHON.—Comment! Je suis dans le journal?

HENRIETTE.—Lis toi-même...là...(*Elle lui donne le journal.*)

PERRICHON.—Vous allez voir que je suis tombé du jury! (*Lisant.*) “On nous écrit de Chamouny....

TOUS.—Tiens! (*Ils se rapprochent.*)

PERRICHON, *lisant*.—Un événement qui aurait pu avoir des suites déplorables vient d'arriver à la mer de Glace....M. Daniel S.....a fait un faux pas et a disparu dans une de ces crevasses si redoutées des voyageurs. Un des témoins de cette scène (qu'il nous permette de le nommer.)” (*Parlé.*) Comment donc! si je le permets! (*Lisant.*) “M. Perrichon, notable commerçant de Paris et père de famille, n'écoutant que son courage, et au mépris de sa propre vie, s'est élancé dans le gouffre.” (*Parlé.*) C'est vrai, “et après des efforts inouïs, a été assez heureux pour en retirer son compagnon. Un si admirable dévouement n'a été surpassé que par la modestie de M. Perrichon, qui s'est dérobé aux félicitations de la foule émue et attendrie....Les gens de cœur de tous les pays nous sauront gré de leur signaler un pareil trait!”

DANIEL, *à part*.—Trois francs la ligne!

PERRICHON, *relisant lentement la dernière phrase*.—“Les gens de cœur de tous les pays nous sauront gré de leur signaler un pareil trait.” (*A Daniel, très ému.*) Mon ami....mon enfant! embrassez-moi! (*Ils s'embrassent.*)

DANIEL, *à part*.—Décidément, j'ai la corde.

PERRICHON, *montrant le journal*.—Certes, je ne suis pas un révolutionnaire, mais je le proclame hautement, la presse a du bon ! (*Mettant le journal dans sa poche et à part.*) J'en ferai acheter dix numéros.

5. Mme. de La Tour lui dit : "Mon fils, si vous nous quittez, qu'allons-nous devenir?"

—Il répéta en tremblant ces mots : "Mon fils.....mon fils..... Vous, ma mère ! lui dit-il, vous qui séparez le frère d'avec la sœur ! * * * * * Tous deux, élevés sur vos genoux, nous avons appris de vous à nous aimer ; tous deux nous nous le sommes dit mille fois. Et maintenant, vous l'éloignez de moi ! Vous l'envoyez en Europe, dans ce pays barbare qui vous a refusé un asile, et chez des parents cruels qui vous ont vous-même abandonnée. Vous me direz : Vous n'avez plus de droits sur elle ; elle n'est pas votre sœur. Elle est tout pour moi, ma richesse, ma famille, ma naissance, tout mon bien. Je n'en connais plus d'autre. Nous n'avons eu qu'un toit, qu'un berceau, nous n'aurons qu'un tombeau. Si elle part, il faut que je la suive. Le gouverneur m'en empêchera ? M'empêchera-t-il de me jeter à la mer ? Je la suivrai à la nage. La mer ne saurait m'être plus funeste que la terre. Ne pouvant vivre ici près d'elle, au moins je mourrai sous ses yeux, loin de vous. Mère barbare ! femme sans pitié ! puisse cet Océan où vous l'exposez ne jamais vous la rendre ! puissent ces flots vous rapporter mon corps, et le roulant avec le sien parmi les cailloux de ces rivages, vous donner par la perte de vos deux enfants un sujet éternel de douleur.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

FRENCH GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE.—*The extract is given merely as a basis for the questions which follow, and is not to be translated.*

Placé dès l'âge de douze ans chez un de ces collectionneurs-commerçants qui se sont donné le nom de *naturalistes*, parce qu'ils mettent la création sous verre pour la débiter en détail, mon père avait toujours mené une vie pauvre et laborieuse. Levé avant le jour, tour à tour garçon de magasin, commis, 5 ouvrier, il devait suffire seul à tous les travaux d'un commerce dont son patron récoltait tous les profits. A la vérité, celui-ci avait une habileté spéciale pour faire valoir l'œuvre des autres. Incapable de rien exécuter, nul ne savait mieux vendre. Ses paroles étaient un filet dans lequel on se trouvait pris avant de 10 l'avoir aperçu. Du reste, ami de lui seul, regardant le producteur comme son ennemi, et l'acheteur comme sa conquête, il les exploitait tous deux avec cette inflexible persistance qu'enseigne l'avarice.

1. Give the exact force of *levé* (line 5), and of *rien* (line 9).

2. *Travaux*. Give the other plural of *travail*, and distinguish the meaning of the two forms.

3. *Ces, celui-ci*. Distinguish carefully between demonstrative adjectives and demonstrative pronouns. Give the form for the masculine singular in every case, with one example of each to show its proper use. Translate the examples.

[OVER.]

4. *Donné* (line 2). Explain the reason for the participle's taking this form.

5. *Avant de l'avoir aperçu*. Rewrite this clause, substituting *avant que* for *avant* and making all other necessary changes.

6. Write the first person plural of the past definite of *placé* (line 1), *mettent* (line 3), *devait* (line 6), *suffire* (line 6), *savait* (line 9), *vendre* (line 9).

7. Write the third person plural of the future, and of the present subjunctive of *mené* (line 4), *suffire* (line 6), *faire* (line 8), *valoir* (line 8), *savait* (line 9), *aperçu* (line 11).

8. *Qu'enseigne l'avarice* (line 14). Account for the order of words in this clause.

B.—(Composition.)

NOTE.—*Numerals must be written in words, not in figures.*

9. Translate into French :

- (a) We must take care not to do that.
- (b) He had to stop more than once ; he was so tired.
- (c) She will have to read again ; we could not hear her.
- (d) I should not have to go to town, if he were willing to go.
- (e) We do not think it is necessary for you to speak to her about it.

10. Translate into French :

- (a) You will not succeed in your examinations, unless you study more diligently.
- (b) We were afraid he would come before we were ready to start.
- (c) They would be afraid we were not coming, if we were to wait longer.
- (d) She had not finished working, although it was nearly midnight.
- (e) Those gentlemen have gone away without my speaking to them.

11. Translate into French :

- (a) Our cousins will come and visit us in the month of August.

- (b) I had just received a letter from France that afternoon.
- (c) If he should happen to arrive before half-past twelve (noon) tell him to wait.
- (d) They will never come back, as long as you are angry at them.
- (e) What you have agreed upon will never suit me or my friends.

12. Translate into French :

- (a) The invitation you have received for the eighth is from Mrs. de Thou.
- (b) The young lady we heard singing on the eleventh is Miss Drouet.
- (c) The five hundred dollars you lost a fortnight ago have been found again.
- (d) The ten hours' sleep I had last night made me feel better.
- (e) The gentleman we met at your house has grown stouter since then.

13. Translate into French :

A few years ago a professor, who is now at a college in the United States, came to Canada to be a professor in one of our universities. At that time he was not yet thirty, and, although he wore a beard, he did not appear to be at all old. Shortly after his arrival in Canada, he went into a building belonging to the college to get some information he wanted. He asked a great many questions, so the student who was talking to him (a third year man he was) said to him at length: "Then you have come down to attend college for the first time?" After a moment's hesitation the answer came: "Yes, but I am going to deliver the lectures." And then only did the student know what a mistake he had made.

Education Department, Ontario

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

GERMAN AUTHORS.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.

Translate into English :

1. *Bolz* (am Tische links Briefe schnell öffnend, durchsehend und mit Bleistift bezeichnend). Ich habe die Revision bereits gemacht, alter Schelm.

Müller. Nicht ganz. Hier unten ist noch das Mannigfaltige, welches Herr Bellmans den Lesern gegeben hat.

Bolz. (liest in der Zeitung) Wäsche vom Boden gestohlen—Concert, Concert, Vereinsitzung, Theater—Alles in Ordnung—Neuerfundene Locomotive; die große Seeschlange gesehen. (Aufspringend) Alle Wetter, kommt der wieder mit der alten Seeschlange! ich wollte, sie würde ihm als Gese gekocht und er müßte sie kalt aufessen. (eilt zur Thür rechts). Bellmans, Ungehener, komm hervor!

Bellmann (von rechts eintretend, die Feder in der Hand). Was gibt's? Wozu der Lärm?

Bolz (feierlich). Bellmans, als wir Dir die Ehre erwiesen, Dich mit Verfertigung der Rippesachen für dieses Blatt zu betrauen, da war die Meinung nicht, daß Du die ewige große Seeschlange durch die Spalten unserer Zeitung wälzen solltest! — — Wie konntest Du die abgedroschene Lüge wieder hineinsetzen?

Bellmann. Sie paßte gerade, es fehlte an sechs Zeilen.

Bolz. Das ist eine Entschuldigung, aber keine gute. Erfinde Deine eignen Geschichten, wozu bist Du Journalist? Mache ein kleines „Eingesandt,“ z. B. eine Betrachtung über Menschenleben im allgemeinen, oder über das Umherlaufen von Hunden auf der Straße, oder suche eine haarsträubende Geschichte heraus, vielleicht einen Mordmord aus Höflichkeit, oder wie ein Hamster sieben schlafende Kinder erbiten hat, oder so etwas. — Es gibt so vieles, was geschieht, und so ungeheuer vieles, was nicht geschieht, daß es einem ehrlichen Zeitungsschreiber nie an Neuigkeiten fehlen darf.

2. Das Ausbleiben der feindlichen Flotte in diesem entscheidenden Augenblick belebte aufs neue seine Hoffnung. Noch schien der schlimme Zustand seiner Brücke den Fein-

[OVER.]

den ein Geheimniz zu sein, und war es gleich nicht möglich, das Werk so vieler Monate in wenigen Stunden wieder herzustellen, so war schon vieles gewonnen, wenn man auch nur den Schein davon zu erhalten wusste. Alles musste daher Hand ans Werk legen, die Trümmer wegzuschaffen, die umgestürzten Balken wieder aufzurichten, die zerbrochenen zu ersetzen, die Lücken mit Schiffen auszufüllen. Der Herzog selbst entzog sich der Arbeit nicht, und seinem Beispiel folgten alle Offiziere.

B.

Translate into English :

Ein alter Mensch stand in der Neujahrsnacht am Fenster und schaute mit dem Blicke einer langen Verzweiflung auf zum unbeweglichen, ewig blühenden Himmel und herab auf die stille, reine, weiße Erde, worauf jetzt niemand so freuden- und schlaflos war als er. Denn sein Grab stand nahe bei ihm; es war bloß vom Schnee des Alters, nicht vom Grün der Jugend verdeckt, und er brachte aus dem ganzen, reichen Leben nichts mit als Irrtümer, Sünden und Krankheiten, einen verheerten Körper, eine verödete Seele, die Brust voll Gift und ein Alter voll Reue.

Seine schönen Jugendtage wandten sich heute als Gespenster um, und zogen ihn wieder vor den holden Morgen hin, wo ihn sein Vater zuerst auf den Scheideweg des Lebens gestellt hatte, der rechts auf der Sonnenbahn der Tugend in ein weites, ruhiges Land voll Licht und Ernten und voll Engel bringt, und welcher links in die Maulwurfsgänge des Lasters hinabzieht, in eine schwarze Höhle voll heruntertropfenden Giftes, voll zischender Schlangen und finsterner, schwüler Dämpfe.

Ach, die Schlangen hingen um seine Brust, und die Gifftropfen auf seiner Zunge, und er wußte nun, wo er war!

Sinnlos und mit unaussprechlichem Gram rief er zum Himmel hinauf: „Gieb mir meine Jugend wieder! O Vater, stelle mich auf den Scheideweg wieder, damit ich anders wähle!“

Er konnte es nicht mehr sehen;—er verhüllte das Auge; tausend heiße Thränen strömten versiegend in den Schnee;—er seufzte nur noch leise, trostlos und sinnlos: „Komme wieder, Jugend, komme wieder!“—Und sie kam wieder; denn er hatte nur in der Neujahrsnacht so fürchterlich geträumt. Er war noch ein Jüngling; nur seine Verirrungen waren kein Traum gewesen. Aber er dankte Gott, daß er, noch jung, in den schmutzigen Gängen des Lasters umkehren und sich auf die Sonnenbahn zurückbegeben konnte, die ins reine Land der Ernten leitet.

Kehe mit ihm um, junger Leser, wenn du auf seinem Irrwege stehst! Dieser schreckende Traum wird künftig dein Richter werden; aber, wenn du einst jammervoll rufen würdest: „Komme wieder, schöne Jugend!“ so würde sie nicht wiederkommen.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

GERMAN GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE.—*The extracts are given merely as a basis for the questions which follow, and are not to be translated.*

(a) OLDENDORF (*lächelnd*). Du bist ein gemeiner Intrigant.

BOLZ (*ihn vom Stuhle nütigend*). Bitte, du findest Papier und Tinte dort. Komm, mein Schatz, komm. (*begleitet ihn zur Thür links, Oldendorf ab. Bolz hineinrufend*). Willst du eine Cigarre haben? Eine alte Ugues? (*zieht ein Cigarren-Etui aus der Tasche*) Nicht?—Schreibe nur nicht zu wenig, es soll ein Hauptartikel werden! (*schliesst die Thür, ruft in die Thür rechts*). Der Professor schreibt den Artikel selbst, sorgen Sie, dass ihn Niemand stört.—(*nach dem Vordergrund*) Das wäre abgemacht.—Adelheid hier in der Stadt?—Da will ich doch gleich zu ihr!—Halt, immer hübsch kaltblütig. Du, mein alter Bolz, bist nicht mehr der braune Bursch, aus dem Pastorgarten, und wenn du's noch bist, *sie* ist längst eine andere geworden. Das Gras ist gewachsen über dem Grabe einer gewissen kindischen Neigung. Wozu trommelst du jetzt auf einmal so unruhig, liebe Seele? Sie ist hier in der Stadt gerade so weit von dir entfernt, als auf ihrem Gute. (*sich setzend, mit einem Bleistift spielend*). Nichts über kaltes Blut! brummte der Salamander, als er im Ofenfeuer sas.

(b) Noch ehe Gent an den König überging, waren die Städte Vilvorden und Herentals in die Hände der Spanier
[OVER.]

gefallen, auch die Blockhäuser unweit dem Flecken Willebroek von ihnen besetzt worden, wodurch Antwerpen von Brüssel und Mecheln abgeschnitten wurde. Der Verlust aller dieser Plätze, der in so kurzer Zeit erfolgte, entrisz den Antwerpen jede Hoffnung eines Succurses aus Brabant und Flandern, und schränkte alle ihre Aussichten auf den Beistand ein, der aus Seeland erwartet wurde, und welchen zu verhindern der Herzog von Parma nunmehr die ernstlichsten Anstalten machte.

1. Give :

- (a) the *nom. plural* of *Intrigant*, *Schatz*, *Bursch*, *Gras*, *Garten* ;
- (b) the *dat. sing.* of *Niemand*, *Bursch* ;
- (c) the German for *with long, green grass*.

2. Explain the use of the *pronoun of the second person* in extract (a), and distinguish between the general use of *du* and *sie*.

3. Give the *3rd pers. sing. pres. indic.* of *komm*, *gewachsen*, *sasz*, *gefallen*, *entrisz*.

4. Write notes on :

- (a) the use of *tense* and *mood* in *findest* and *Das wäre abgemacht* ;
- (b) the form of the verb in *Schreibe nur nicht zu wenig*.

5. *Waren gefallen* (in b). Give rules for the use of *sein* as auxiliary. Illustrate as far as possible.

6. Make a list of the inseparable prefixes in extract (b) explaining the force of each.

7. Write a note on word-order in German sentences, illustrating from and also noting any peculiarities in the extracts.

8. Indicate the accented syllable of *Intrigant*, *hineinruffend*, *Artikel*, *Vordergrund*, *Verlust*, *Aussichten*.

B.—(Composition.)

9. Translate into German :

- (a) I wanted to go to Toronto yesterday but could not as it was rainy.
- (b) You should have answered my letter immediately after receiving it.
- (c) Where are you off to now with your gun? Are there squirrels (*Eichhörnchen*) to be found in the woods?
- (d) What was he to do? Neither his brother nor his friend would help him, and he dared not call any one.
- (e) I was very glad to see your father and to hear from him that you were well and happy.

10. Translate into German :

- (a) He arrived here last Wednesday at 2:35 P.M.
- (b) He hopes to reach England in a week or ten days if the weather is fine.
- (c) Did you hear it strike? I wonder if it was three or four! My watch is at the watchmaker's.
- (d) When do you expect your brother? Tomorrow or the day after? Oh! not till next week.
- (e) Every day, in fact, oftentimes every hour in the day, my little friend makes me a visit.

11. Translate into German :

- (a) Doctor Bolz! I told the gentleman twice that you were not at home.
- (b) But he said he must see you and would wait for you. What could I do?
- (c) Well, I suppose it was hard to drive the poor man away. In which room is he?
- (d) Will you allow me to use your pen a moment? I have left out a word.
- (e) What happened your friend this morning? She was ten minutes late at the lesson.

12. Translate into German :

Freytag's comedy which we read this year is one of his best known and most popular works, as well as one of the

very best plays in all German Literature. The chief characters are the retired Colonel Berg and his daughter Ida, her friend Miss Adelheid Runeck, also the two editors and intimate friends, Prof. Oldendorf and Dr. Bolz. The professor was in love with Ida and she with him, and Dr. Bolz had in his youth given his heart to Miss Adelheid, who still retained possession of it. But the course of true love never runs smooth, as the proverb has it, nor did it in this case. An election in which the professor was the Liberal candidate, and the colonel that of the government, caused the honest but hot-tempered colonel to forbid the professor his house. After the election, however, which the professor won, through the good offices and clever management of Miss Adelheid, there was a gradual reconciliation between all parties and, in the end, the professor and Ida are made happy, nor are Dr. Bolz and Miss Adelheid any less so.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

LATIN AUTHORS.

Examiners : { W. DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

Translate :—

(a) Haec directa percontatio ac denuntiatio belli magis ex dignitate populi Romani visa est quam de foederum iure verbis disceptare, cum ante, tum maxime Sagunto excisa. Nam si verborum disceptationis res esset, quid foedus Hasdrubalis cum Lutatii priore foedere, quod mutatum est, comparandum erat, cum in Lutatii foedere diserte additum esset, ita id ratum fore, si populus censuisset, in Hasdrubalis foedere nec exceptum tale quicquam fuerit, et tot annorum silentio ita vivo eo comprobatum sit foedus, ut ne mortuo quidem auctore quicquam mutaretur? Quanquam, etsi priore foedere staretur, satis cautum erat Saguntinis, sociis utrorumque exceptis; nam neque additum erat “iis, qui tunc essent,” nec, “ne qui postea assumerentur.”

(b) Consulum designatorum alter Flaminius, cui eae legiones, quae Placentiae hibernabant, sorte evenerant, edictum et litteras ad consulem misit, ut is exercitus Idibus Martiis Arimini adesset in castris. Huic in provincia consulatum inire consilium erat memori veterum certaminum cum patribus, quae tribunus plebis et quae postea consul prius de consulatu, qui abrogabatur, dein de triumpho habuerat, invisus etiam patribus ob novam legem, quam Q. Claudius tribunus plebis adverso senatu atque uno patrum adiuvante C. Flaminio tulerat.

1. *Cum ante, tum maxime.* What is the general rule for the use of *cum tum*?

2. Parse fully *ratum fore, fuerit, staretur, iis.*

[OVER.]

3. *Utrorumque*. When is *uterque* used in the plural?

4. Explain briefly and clearly the meaning of:

(a) *Consul designatus*.

(b) *Certamina, quae tribunus plebis habuerat*.

(c) *Certamina, quae postea de consulatu, qui abrogabatur, habuerat*.

(d) *Latinarum feriarum mora*.

(e) *Praerogativa militaris*.

B.

Translate:—

(a) Non his iuventus orta parentibus
infecit aequor sanguine Punico,
Pyrrhumque et ingentem cecidit
Antiochum Hannibalemque dirum;

sed rusticorum mascula militum
proles, Sabellis docta ligonibus
versare glebas et severae
matris ad arbitrium recisos

portare fustes, sol ubi montium
mutaret umbras et iuga demeret
bobus fatigatis, amicum
tempus agens abeunte curru.

damnosa quid non imminuit dies?
aetas parentum peior avis tulit
nos nequiores, mox daturos
progeniem vitiosiore.

(b) Non incisa notis marmora publicis,
per quae spiritus et vita redit bonis
post mortem ducibus, non celeres fugae
reiectaeque retrorsum Hannibalis minae,
non incendia Karthaginis impiae
eius, qui domita nomen ab Africa
lucratus rediit, clarius indicant
laudes quam Calabriae Pierides: neque,
si chartae sileant quod bene feceris,
mercedem tuleris. quid foret Iliae
Mavortisque puer, si taciturnitas
obstaret meritis invida Romuli?
ereptum Stygiis fluctibus Aeacum

virtus et favor et lingua potentium
vatum divitibus consecrat insulis.

1. Scan the first stanza of (a) and the first line of (b).
2. Parse fully, *demeret, avis*.
3. Explain briefly the force of the epithets *ingentem, mascula, severae, damnosa, Calabriae, invida, potentium*.
4. *Dirum*. Illustrate from Livy the common Roman view of the character of Hannibal.
5. What evidence from the first six odes of Bk. III. of the date of its composition?
6. Show how the last stanza of (a) sums up the train of thought which runs through the first six odes of Book III.

C.

Translate :—

Primis tenebris silentio mota castra; boves aliquanto ante signa acti. Ubi ad radices montium viasque angustas ventum est, signum extemplo datur, ut accensis cornibus armenta in adversos concitentur montes; et metus ipse relucentis flammae ex capite calorque iam ad vivum ad imaue cornuum adveniens velut stimulos furore agebat boves. Quo repente discursu, haud secus quam silvis montibusque accensis, omnia circa virgulta visa ardere, capitumque irrita quassatio excitans flammam hominum passim discurrentium speciem praebebat. Qui ad transitum saltus insidendum locati erant, ubi in summis montibus ac super se quosdam ignes conspexere, circumventos se esse rati praesidio excessere. Qua minime densae micabant flammae, velut tutissimum iter petentes summa montium iuga, tamen in quosdam boves palatos a suis gregibus inciderunt. Et primo cum procul cernerent, veluti flammam spirantium miraculo attoniti constiterunt; deinde ut humana apparuit fraus, tum vero insidias rati esse, cum maiore tumultu concitant se in fugam. Levi quoque armaturae hostium incurrere; ceterum nox aequato timore neutros pugnam incipientes ad lucem tenuit. Interea toto agmine Hannibal traducto per saltum, et quibusdam in ipso saltu hostium oppressis, in Agro Allifano posuit castra.

Education Department, Ontario.

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THE HIGH SCHOOL SENIOR LEAVING AND
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LATIN GRAMMAR AND COMPOSITION.

Examiners : { W. DALE, M.A.
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1. *Putavit urbem captum iri.* Explain the syntax of (a) *urbem*, (b) *captum*, (c) *iri*. Express in Latin, without using the passive infinitive.

2. Explain the syntax or the use of the italicised words in the following:

- (a) *Quid est cur illi vobis comparandi sint?*
- (b) *Pro Italia vobis est pugnandum.*
- (c) *Victi amplius ducenti ceciderunt.*
- (d) *Taedebat multos imperii Punici.*
- (e) *In eos versa peditum acies haud dubium fecit quin, nisi firmata extrema agminis fuissent, accipienda clades.*
(Explain the use of the periphrastic form here.)

3. Translate into Latin :

- (a) He did not doubt that you would be obeyed.
- (b) Do you think that such an enterprise should be lightly undertaken?
- (c) Nor am I afraid, soldiers, that anyone will say that I am speaking thus for the purpose of encouraging you (use *causā*).
- (d) Do not waste time in sending embassies.
- (e) O that I may be a false prophet!
- (f) Hannibal, hearing this, gave the signal for immediate departure.
- (g) If Hamilcar were alive, we should be at war with Rome.
- (h) "Go forward upon thy way," said the youth; "and inquire no further." (Use *indirect narration*).

[OVER.]

4. Translate into Latin :

Such were the preparations made by the great city of Rome for the defence of these unfortunate people ; instead of sending a fleet or an army to their aid, she was disputing about the violation of laws and the infringement of treaties. But such apparently heartless desertion and betrayal entailed the usual consequences : she forfeited, for the time being at least, the confidence of her loyal allies in Spain. Meantime the threatened town had with the utmost alacrity set about making preparations on its own account for the approaching siege. It had a large population and—thanks to its maritime and agricultural products—considerable wealth ; and, before the enemy could invest it with his troops, large stores of provisions and a strong force of infantry and cavalry, supplied with siege-engines and all known munitions of war, had been purchased or collected from the allies and brought into the place.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY
HONOR MATRICULATION.

GREEK AUTHORS.

Examiners : { W. DALE, M.A.
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J. C. ROBERTSON, B.A.

A.

Translate :

(a) ὦ Ὀδυσσεῦ, τὸ μὲν οὐ τί σ' εἰσκομεν εἰσορόωντες
ἡπεροπῆά τ' ἔμεν καὶ ἐπὶ κλοπον, οἷά τε πολλοὺς
βόσκει γαῖα μέλαινα πολυσπερέας ἀνθρώπους
ψεύδεά τ' ἀρτύνοντας, ὅθεν κέ τις οὐδὲ ἴδοιτο·
σοὶ δ' ἔπι μὲν μορφὴν ἐπέων, ἐνὶ δὲ φρένες ἐσθλαί,
μῦθον δ' ὥς ὅτ' ἀοιδὸς ἐπισταμένως κατέλεξας,
πάντων τ' Ἀργείων σέο τ' αὐτοῦ κήδεα λυγρά.

(b) Ὡς ἐφάμην, ψυχὴ δὲ ποδώκεος Αἰακίδαο
φοῖτα μακρὰ βιβᾶσα κατ' ἀσφοδελὸν λειμῶνα,
γηθοσύνη ὅ οἱ υἱὸν ἔφην ἀριδείκετον εἶναι.

Αἱ δ' ἄλλαι ψυχαὶ νεκῶν κατατεθνηώτων
ἔστασαν ἀχνύμεναι, εἶροντο δὲ κήδε' ἐκάστη.
οἷη δ' Αἴαντος ψυχὴ Τελαμωνιάδαο
νόσφιν ἀφ'esτήκει, κεχολωμένη εἵνεκα νίκης,
τήν μιν ἐγὼ νίκησα δικαζόμενος παρὰ νηυσὶ
τεύχεσιν ἀμφ' Ἀχιλλῆος· ἔθηκε δὲ πότνια μήτηρ.
παῖδες δὲ Τρώων δίκασαν καὶ Παλλὰς Ἀθήνη.
ὥς δὴ μὴ ὄφελον νικᾶν τοιῶδ' ἐπ' ἀέθλῳ.

HOMER, *Odyssey*, XI.

1. Parse fully ἔπι in extract (a), βιβᾶσα, Αἰακίδαο, οἷ, ἔστασαν, ὄφελον in extract (b).

2. Scan the first three lines of extract (b).

(OVER.)

3. (a) Explain the case construction of τὸ, τί in extract (a); μακρὰ, ὅ, τήν in extract (b).

(b) State the Homeric use of the article as shown by τὸ in extract (a); αἱ, τήν in extract (b).

(c) Give the Attic prose equivalents of εἰσορόωντες, ἔμεν, ὥς, φοίτα, μιν, νηυσὶ.

4. Compare and contrast Homer's and Socrates' conceptions of the condition of the dead?

B.

Translate :

Ἴσως ἂν οὖν δόξειεν ἄτοπον εἶναι, ὅτι δὴ ἐγὼ ἰδίᾳ μὲν ταῦτα συμβουλεύω περιῶν καὶ πολυπραγμονῶ, δημοσίᾳ δὲ οὐ τολμῶ ἀναβαίνων εἰς τὸ πλῆθος τὸ ὑμέτερον συμβουλεύειν τῇ πόλει. τούτου δὲ αἴτιόν ἐστιν ὃ ὑμεῖς ἐμοῦ πολλάκις ἀκηκόατε πολλαχοῦ λέγοντος, ὅτι μοι θεῖόν τι καὶ δαιμόνιον γίγνεται [φωνή], ὃ δὴ καὶ ἐν τῇ γραφῇ ἐπικωμῶδων Μέλητος ἐγράψατο· ἐμοὶ δὲ τοῦτ' ἐστὶν ἐκ παιδὸς ἀρξάμενον φωνή τις γιγνομένη, ἥ ὅταν γένηται, αἰεὶ ἀποτρέπει με τοῦτο, ὃ ἂν μέλλω πράττειν, προτρέπει δὲ οὐποτε· τοῦτ' ἐστὶν ὃ μοι ἐναντιοῦται τὰ πολιτικὰ πράττειν. καὶ παγκάλως γέ μοι δοκεῖ ἐναντιοῦσθαι.

PLATO, *Apology*.

5. (a) ταῦτα (line 1). What is meant?

(b) ἐπικωμῶδων. Explain the reference.

(c) τὰ πολιτικὰ πράττειν. Give concisely Socrates' experience of public life as described in the next chapter.

6. Explain the construction of ἐμοῦ and τοῦτο. What would ἀποτρέπει ... ὃ ἂν μέλλω become in secondary sequence?

C.

Translate :

ΣΩ. Ἐκ τούτων δὴ ἄθρει. ἀπιόντες ἐνθένδε ἡμεῖς μὴ πείσαντες τὴν πόλιν πότερον κακῶς τινας ποιούμεν, καὶ ταῦτα οὐς ἥκιστα δεῖ, ἢ οὐ; καὶ ἐμμένομεν οἷς ὡμολογήσαμεν δικαίοις οὖσιν ἢ οὐ;

ΚΡ. Οὐκ ἔχω, ὦ Σώκρατες, ἀποκρίνασθαι πρὸς ὃ ἐρωτᾷς· οὐ γὰρ ἐννοῶ.

ΣΩ. Ἄλλ' ὧδε σκόπει. εἰ μέλλουσιν ἡμῖν ἐνθένδε εἴτε ἀποδιδράσκειν, εἴθ' ὅπως δεῖ ὀνομάσαι τοῦτο, ἐλθόντες οἱ νόμοι καὶ τὸ κοινὸν τῆς πόλεως ἐπιστάντες ἔροιντο· εἰπέ μοι, ὦ Σώκρατες, τί ἐν νῶ ἔχεις ποιεῖν; ἄλλο τι ἢ τοῦτω τῷ ἔργῳ, ᾧ ἐπιχειρεῖς, διανοεῖ τοὺς τε νόμους ἡμᾶς ἀπολέσαι καὶ ξύμπασαν τὴν πόλιν τὸ σὸν μέρος; ἢ δοκεῖ σοι οἶόν τε ἔτι ἐκείνην τὴν πόλιν εἶναι καὶ μὴ ἀνατετράφθαι, ἐν ἣ αἱ γενόμεναι δίκαι μηδὲν ἰσχύουσιν, ἀλλ' ὑπὸ ἰδιωτῶν ἄκυροί τε

γίγνονται καὶ διαφθείρονται ; τί ἐροῦμεν, ὦ Κρίτων, πρὸς ταῦτα καὶ ἄλλα τοιαῦτα ; πολλὰ γὰρ ἂν τις ἔχοι, ἄλλως τε καὶ ῥήτωρ, εἰπεῖν ὑπὲρ τούτου τοῦ νόμου ἀπολλυμένου, ὃς τὰς δίκας τὰς δικασθείσας προστάττει κυρίας εἶναι. ἢ ἐροῦμεν πρὸς αὐτοὺς ὅτι ἡδίκη γὰρ ἡμᾶς ἢ πόλις καὶ οὐκ ὀρθῶς τὴν δίκην ἔκρινε ;

PLATO, *Crito*.

7. Explain the case construction of οὓς, οἷς . . . οὔσιν, ἡμῖν, μέρος ; the tense of πείσαντες and of ἀποκρίνασθαι ; the use of μὴ (before πείσαντες) and of μηδὲν ; the use of ὅτι (in the last clause).

8. Ἐκ τούτων δὴ ἄθρει. State concisely what is referred to. Show how this might be called the turning point of the discussion.

D.

Translate :

Λέξω δὲ καὶ ἃ Ἑρμογένους τοῦ Ἰππονίκου ἤκουσα περὶ αὐτοῦ· ἔφη γὰρ, ἤδη Μελήτου γεγραμμένου αὐτὸν τὴν γραφὴν, αὐτὸς ἀκούων αὐτοῦ πάντα μᾶλλον ἢ περὶ τῆς δίκης διαλεγομένου, λέγειν αὐτῷ ὡς χρὴ σκοπεῖν ὅ τι ἀπολογήσεται, τὸν δὲ τὸ μὲν πρῶτον εἰπεῖν, Οὐ γὰρ δοκῶ σοι τοῦτο μελετῶν διαβεβιωκέναι ; ἐπεὶ δὲ αὐτὸν ἤρετο, ὅπως ; εἰπεῖν αὐτὸν, ὅτι οὐδὲν ἄλλο ποιῶν διαγεγένηται ἢ πράττων τὰ δίκαια καὶ τῶν ἀδίκων ἀπεχόμενος, ἥνπερ νομίζοι καλλίστην μελέτην ἀπολογίας εἶναι. Καὶ μὴν, φάναι αὐτὸν, ἤδη μοῦ ἐπιχειροῦντος φροντίσαι τῆς πρὸς τοὺς δικαστὰς ἀπολογίας, ἡναντιώθη τὸ δαιμόνιον. καὶ αὐτὸς εἰπεῖν, Θαυμαστὰ λέγεις· τὸν δὲ, Θαυμάζεις, φάναι, εἰ τῷ θεῷ δοκεῖ βέλτιον εἶναι ἐμὲ τελευτᾶν τὸν βίον ἤδη ; οὐκ οἶσθ' ὅτι μέχρι μὲν τοῦδε τοῦ χρόνου ἐγὼ οὐδενὶ ἀνθρώπων ὑφείμην ἂν οὔτε βέλτιον οὔθ' ἡδιον ἐμοῦ βεβιωκέναι ; ἄριστα μὲν γὰρ οἶμαι ζῆν τοὺς ἄριστα ἐπιμελομένους τοῦ ὡς βελτίστους γίγνεσθαι, ἡδιστα δὲ τοὺς μάλιστα αἰσθανομένους ὅτι βελτίους γίγνονται.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY
HONOR MATRICULATION.

GREEK GRAMMAR AND COMPOSITION.

Examiners : { WILLIAM DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

1. Show how ἔχω, ἔξω, εἶχον and ἔσχον are derived from the same root.

2. Write out fully the fut. ind. mid. of φαίνω and the aor. subj. pass. of τίθημι.

3. Parse fully the underlined words in the following :

(a) ἐν τοῖς βαρύτατ' ἂν ἐνέγκαιμι.

(b) ἐξὸν σωθῆναι.

(c) ὁ, τι ἂν τύχωσι, τοῦτο πράξουσιν.

(d) ἐκ ταυτησὶ δὴ τῆς ἐξετάσεως, πολλαὶ μὲν ἀπέχθεται μοι γεγόνاسιν καὶ οἶαι χαλεπώταται, ὥστε πολλὰς διαβολὰς ἀπ' αὐτῶν γεγονέναι, ὄνομα δὲ τοῦτο λέγεσθαι, σοφὸς εἶναι.

4. Translate into Greek :

(a) They happened to be present.

(b) We ought to persuade those who do wrong.

(c) We ought to obey the magistrates.

Use verbal in -τέος in (b) and (c).

(d) They will become more beautiful than ever.

(e) You are too young to know the reason for his death.

(OVER.)

B.

Translate into Greek ;

I had lately ceased going to school, and my father was consulting with his friends what else (καὶ) he would have me taught. Now most of them thought that learning (παιδεία) required much labor, a long time and a great fortune (δαπάνη), but that our circumstances were narrow and in need of some speedy assistance (ἐπικουρία). But if I learned a common (βάνανσος) trade, in the first place, I myself should have a sufficiency (τὰ ἀρκοῦντα) from my trade, and should in no long time delight my father by always bringing home the produce (τὸ γιγνόμενον) of my labor. Then they discussed which was the best of trades, and easiest to be learned; and each praising a different trade, my father, turning to my uncle, who was a statuary (ἐρμογλύφος) said, it is not right that any other trade should be preferred while you are present.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

ZOOLOGY.

Examiners : { R. R. BENSLEY, B.A.
C. A. CHANT, B.A.
A. P. KNIGHT, M.A.

1. Name the submitted animal. To what order, class and sub-kingdom does it belong?
2. Make drawings to illustrate fully the external anatomy of this animal. Name the various organs and parts.
3. Define the nature and uses of respiration. How is it effected in the various animal sub-kingdoms? Illustrate your answer by a detailed description of illustrative types.
4. Compare the vertebral column of the fish with that of a mammal.
5. Define accurately what is meant by metamorphosis. State in detail an instance from the vertebrata and one from the invertebrata.
6. Draw the submitted section, naming the various parts.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

BOTANY.

Examiners: { R. R. BENSLEY, B.A.
C. A. CHANT, B.A.
A. P. KNIGHT, M.A.

B.

1. Describe accurately the submitted plant.
2. (a) Give an account of the characteristics of the Boraginaceæ, comparing them with the Labiatæ.
(b) Mention three genera belonging to the first family, and point out their distinguishing features.
3. Give an account of the various kinds of inflorescence. Name a Canadian plant to illustrate each kind, and state to what family each plant belongs.
4. By what means are seeds distributed?
5. Give an account of the structure and life history of the ferns.
6. Draw the submitted section and name the parts.

SCHEDULE.

NOTE.—Candidates are requested to indicate Class, Sub-Class, and Division thus **X**. Name of Family, Genus and Species must be written in full.

CLASS I.—GYMNOSPERMS.			
CLASS. II.—ANGIOSPERMS.			
SUB-CLASS I.—DICOTYLEDONS.		1. POLYPETALOUS DIVISION,	
		2. GAMOPETALOUS DIVISION,	
		3. APETALOUS DIVISION,	
SUB-CLASS II.—MONOCOTYLEDONS.		1. SPADICEOUS DIVISION,	
		2. PETALOIDEOUS DIVISION,	
		3. GLUMACEOUS DIVISION,	
Family			
Genus			
Species.			

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

CHEMISTRY.

Examiners : $\left\{ \begin{array}{l} \text{R. R. BENSLEY, B.A.} \\ \text{C. A. CHANT, B.A.} \\ \text{A. P. KNIGHT, M.A.} \end{array} \right.$

NOTE.—*An option is allowed between questions 8 and 9.*

1. Compare the hydrides of the members of the nitrogen group.

2. (a) Two-tenths gram of a compound having the composition $\text{C}_{12} \text{H}_{22} \text{O}_{11}$ is burnt in air. Explain the chemical changes that take place, using equations. Calculate the volume of the products of combustion at 100°C and 740mm.

(b) .18 gram of a compound containing carbon, hydrogen and oxygen, is found to contain on analysis .072 gram of carbon, .012 gram of hydrogen, .096 gram of oxygen. Calculate the simplest formula of the substance.

3. Define the terms “oxidising agent” and “reducing agent”, and illustrate your definitions by reference to the experiments:—

(a) Sulphuretted hydrogen gas is passed into a solution of ferric chloride.

(b) Carbon is heated to a high temperature with ferric oxide.

(c) Sulphur dioxide is passed into a solution of permanganate of potash.

Give equations.

4. (a) Dalton's gravimetric analysis of two compounds yielded the following results:—

Nitrogen 63.64,

Oxygen 36.36,

Nitrogen 46.67,

Oxygen 53.33.

Show the relation of these data to Dalton's formulae for these substances (NO and NO_2).

[OVER.]

(b) Gay Lussac's volumetric analysis of the mixture resulting from the decomposition of these same compounds gave the following results:—

Nitrogen $66\frac{2}{3}$ vols.

Nitrogen 50 vols.

Oxygen $33\frac{1}{3}$ vols.

Oxygen 50 vols.

Show the relation of these data to the present formulae for these substances, and to Avogadro's law.

5. (a) Describe what takes place when :

(i) Iron is immersed in a solution of sulphate of copper,

(ii) Copper, in a solution of bichloride of mercury,

(iii) Zinc, in a solution of acetate of lead,

(iv) Magnesium, in a solution of nitrate of silver.

(b) Explain how quantitative results in these experiments can be used as an aid in determining atomic weights.

6. Describe simple laboratory methods of preparing small quantities of (a) metallic arsenic from the trioxide, (b) trichloride of antimony, (c) ferrous sulphate.

7. Sketch the chemistry of lead.

8. What is meant by the "Periodic Law"? Illustrate its significance by reference to the members of group iv. (Carbon=12, silicon=28, tin=118, lead=207.)

9. Determine the acid and the base in the salt submitted.

(c.)

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THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

PHYSICS.

Examiners: { R. R. BENSLEY, B.A.
C. A. CHANT, B.A.
A. P. KNIGHT, M.A.

NOTE—*Experiments must be described in detail, must be capable of giving moderately accurate results, and be such as can be performed with simple apparatus.*

1. (a) Define “ g ”; and give a method of determining it.

(b) Two masses, each 1 kilo, are attached to the ends of a light flexible string and hung over a pulley which moves very easily. Upon one mass a gram weight is put. Neglecting the mass of the string and pulley, find the space the weights will pass through in 10 seconds. [$g=980$.]

2. (a) A steam-engine supplies power to a dynamo which is used to produce electric lights, and also to work a motor, which again runs a circular saw in a mill. Trace the transformation of energy as far as you can, beginning with the fuel fed to the engine.

(b) A body of mass 50 grams falls from a height 30 centimetres above the ground. Find the kinetic and the potential energy at any point on its way down, and hence show that the sum of these two quantities at all points in its path is the same as the energy at the highest point, or that on reaching the ground. [Give units.]

3. A stone is thrown at an angle of 60° with the horizontal with a velocity of 30 metres per second. Find the height it will rise and the range on the horizontal.

4. You wish to find the specific gravity of some oil, and have only a U-tube and a graduated ruler. Explain how you would do it.

[OVER.]

5. (a) State Boyle's Law, and describe how to verify it.

(b) Oxygen gas is sold for lecture purposes at 15 cents per cubic foot at, say, 15°C . and atmospheric pressure. A steel circular cylinder containing the oxygen is 5 feet high and 14 inches in diameter, and the gas is under a pressure of 10 atmospheres, temperature 15°C . After being used at a lecture, the pressure was found to be 6 atmospheres, but the temperature was 21°C . How much should be charged? [$\pi = \frac{22}{7}$.]

6. (a) Give full explanation of a method of finding the latent heat of fusion of ice. Deduce the formula required, allowance being made for calorimeter, and state where errors will likely appear.

(b) If the latent heat, using the centigrade scale, is 80, what is it on the Fahrenheit scale?

7. A thermometer (such as is used by physicians) is graduated only from 95° to 110° F., and you wish to find the temperature of some water, but it is somewhat lower than the lowest graduation, which is just above the bulb. How could you determine its temperature? Illustrate your method numerically.

8. What is meant by the *polarization* of a common voltaic cell (copper and zinc in dilute acid)? Show how you would demonstrate experimentally that there is a back electromotive force?

9. Describe either a copper, a silver, or a hydrogen voltmeter. Give composition of liquid, size of vessel, of electrodes and what current you would expect to measure. Describe how you would prepare the voltmeter for use, and if the hydrogen apparatus is taken, how you would determine the temperature and then allow for it in working out the result.

10. Six similar cells are arranged in series, and the circuit completed through a coil of wire and a galvanometer. The resistance of the battery, coil and galvanometer are 10, 50, and 20 ohms respectively. If the difference of potential between the terminals of the galvanometer be 2 volts, what is the E. M. F. of each cell of the battery?

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ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ENGLISH GRAMMAR, PHILOLOGY, RHE-
TORIC AND PROSODY.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

A.

The queen, his mother,
Lives almost by his looks ; and for myself, --
My virtue, or my plague, be it either which, --
She's so conjunctive to my life and soul,
That as the star moves not but in his sphere,
I could not but by her. The other motive
Why to a public count I might not go,
Is the great love the general gender bear him.

5

1. Analyse the first six lines ("The queen, . . . her") so as to show the various clauses therein and their relations to one another.

2. State the grammatical value and relation of
- | | |
|------------------------|--------------------|
| "almost" (line 2), | "his" (line 5), |
| "for myself" (line 2), | "by her" (line 6), |
| "be" (line 3), | "go" (line 7), |
| "but" (line 5), | "him" (line 8). |

3. (a) Distinguish clearly the different grammatical uses of the compound pronouns ending in *self*. Give examples.

(b) Give the origin and history of *myself*, *himself*, *yourself*, *themselves*.

B.

4. (a) Classify minutely the consonants of the English alphabet.

(b) To what letters in Latin do the following English letters generally correspond in words derived from a common source:—
b, p, t, k, f? Give examples.

[OVER.]

5. "Changes in the meaning of words are due to a variety of causes."

Mention, with examples, at least three of these causes.

6. (a) Distinguish between Presentive (Notional) and Symbolic (Relational) words.

(b) Trace the growth of symbolism in the following:—*thing, shall, there*.

7. (a) Give a list of English words denoting title or official position which contain the root-idea of *old age*; and state the origin, root meaning, and present meaning of each.

(b) State the origin and root meaning of any five of the following:—*reeve, sheriff, mayor, judge, magistrate, policeman, colonel, lieutenant, commodore, admiral*.

8. Account for the prevalence of the following illiterate and colloquial expressions:—

(a) the double negative,

(b) the use of *seen* and *done* as preterites,

(c) the elision of final *g* in words ending in *ing*,

(d) the use of *was* with a plural subject,

(e) the use of the flat adverb, *e.g.* "He writes good,"

(f) *sparrowgrass* for *asparagus*.

C.

(i) Here is wisdom. Here are the principles on which nations are to be governed. Rose-bushes and poor-rates, rather than steam-engines and independence. Mortality and cottages with weather-stains rather than health and long life with edifices which time cannot mellow. We are told that our age has invented atrocities beyond the imagination of our fathers; that society has been brought into a state compared with which extermination would be a blessing; and all because the dwellings of cotton-spinners are naked and rectangular. Mr. Southey has found out a way, he tells us, in which the effects of manufactures and agriculture may be compared, and what is this way? To stand on a hill, to look at a cottage and a factory, and to see which is the prettier. Does Mr. Southey think that the body of the English peasantry live, or ever lived, in substantial or ornamental cottages, with box hedges, flower-gardens, bee-hives, and orchards? If not, what is his parallel worth?

(ii) It was not, however, destined that she or her child should inhabit that little garret. We were to leave our lodgings on Monday morning; but on Saturday evening the child was seized with convulsions, and all Sunday the mother watched and prayed for it; but it pleased God to take the innocent infant from us, and on Sunday, at midnight, it lay a corpse in its mother's bosom. Amen. We have other children, happy and well,

now round about us, and from the father's heart, the memory of this little thing has almost faded; but I do believe that every day of her life the mother thinks of the first-born that was with her for so short a while: many and many a time has she taken her daughters to the grave, in Saint Bride's, where he lies buried; and she wears still at her neck a little, little lock of gold hair, which she took from the head of the infant as he lay smiling in his coffin. It has happened to me to forget the child's birth-day, but to her never; and often, in the midst of common talk, comes something that shows she is thinking of the child still,—some simple allusion that is to me inexpressibly affecting.

9. (a) What quality or qualities of style are exhibited in these extracts?

(b) Show by what devices the rhetorical effects are produced.

(c) Write a brief note on the vocabulary of the second extract.

D.

(i) The curfew tolls the knell of parting day,
 The lowing herd wind slowly o'er the lea,
 The ploughman homeward plods his weary way,
 And leaves the world to darkness and to me.

(ii) But the city, oh the city—the square with the houses! Why?
 They are stone-faced, white as a curd, there's something to take
 the eye!
 Houses in four straight lines, not a single front awry;
 You watch who crosses and gossips, who saunters, who hurries by;
 Green blinds, as a matter of course, to draw when the sun gets
 high;
 And the shops with fanciful signs which are painted properly.

10. State the main difference in the impression produced by the versification in passages (i) and (ii), and point out in detail the causes of this difference.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ALGEBRA.

Examiners: { A. R. BAIN, LL.D.
N. F. DUPUIS, M.A.
A. C. MCKAY, B.A.

1. (a) Find the sum of the first n terms of an Arithmetical Progression of which the p^{th} term is q , and the r^{th} term is s .

(b) How many terms of the series $3 + 5 + 7 + \dots$ must be taken to give the sum 2703? Account for the negative root. 

2. (a) Show that four quantities a, b, c, d are proportionals, if $\frac{pc}{qd} = \frac{pa}{qb}$ according as $\frac{p}{q}$ is $>$ or $<$ or $=$ 1, p and q being any positive integers.

(b) If $(a^2 + b^2 + c^2)(x^2 + y^2 + z^2) = (ax + by + cz)^2$, prove that $\frac{x}{a} = \frac{y}{b} = \frac{z}{c}$, the letters denoting real quantities.

3. Solve:—

$$(a) \quad 3x^2 - 14x - 32849 = 0,$$

$$(b) \quad x^2 + 2yz = 13,$$

$$y^2 + 2zx = 10,$$

$$z^2 + 2xy = 13.$$

4. (a) If $a_1, a_2, a_3, \dots, a_n$ are n consecutive terms of an A. P., show that

$$\frac{1}{a_1 a_2} + \frac{1}{a_2 a_3} + \frac{1}{a_3 a_4} + \cdots + \frac{1}{a_{n-1} a_n} = \frac{n-1}{a_1 a_n}.$$

(b) Show that the harmonical mean between two unequal positive quantities is less than their geometrical mean.

[OVER.]

5. (a) Show that a quadratic function of x can be resolved into linear factors in only one way.

(b) Factor $(b + 2c - 3a)^3 + (c + 2a - 3b)^3 + (a + 2b - 3c)^3$.

(c) Eliminate x from

$$ax^3 + bx^2 + c = 0,$$

$$a_1x^3 + b_1x^2 + c_1 = 0.$$

6. (a) Find the number of combinations of n different things taken r at a time.

(b) Find the "total number of combinations" of n things, (i) when the things are all unlike, (ii) when p of the things are alike, and the rest unlike.

(c) In how many ways can 10 boys and 10 girls form a ring by joining hands, when each person may face either inwards or outwards and no two boys are adjacent?

7. (a) If $f(x) \times f(y) = f(x + y)$, for all values of x and y , prove that $f\left(\frac{p}{q}\right) = \sqrt[q]{f(p)}$; and $f(-n) = \{f(n)\}^{-1}$.

(b) Find the coefficient of x^n in $\left(\frac{1+2x}{1-2x}\right)^2$.

(c) Show that the sum of the squares of the coefficients of the expansion $(1+x)^n$ is $\frac{|2n|}{\{|n|\}^2}$.

8. What sum must be paid for an annuity of a dollars to continue b years, the first payment of the annuity to be made at the end of c years, the rate of interest being r per unit per annum?

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ENGLISH POETICAL LITERATURE.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

1. Point out in detail how the poet makes it seem natural that Bolingbroke should be victorious in his contest with Richard.

2. Describe concisely the First Scene of the Second Act (the one which includes the death of Gaunt), and show what it contributes to the development of the play.

Enter Gaunt and Duchess of Gloster.

Gaunt. Alas! the part I had in Gloster's blood
Doth more solicit me than your exclaims,
To stir against the butchers of his life.
But since correction lieth in those hands
Which made the fault that we cannot correct, 5
Put we our quarrel to the will of heaven,
Who, when they see the hours ripe on earth,
Will rain hot vengeance on offenders' heads.

Duchess. Finds brotherhood in thee no sharper spur?
Hath love in thy old blood no living fire? 10
Edward's seven sons, whereof thyself art one,
Were as seven vials of his sacred blood,
Or seven fair branches springing from one root.
Some of those seven are dried by nature's course,
Some of those branches by the Destinies cut; 15
But Thomas, my dear lord, my life, my Gloster,
One vial full of Edward's sacred blood,
One flourishing branch of his most royal root,
Is crack'd, and all the precious liquor spilt,
Is hack'd down, and his summer leaves all faded, 20

[OVER.]

By envy's hand and murther's bloody axe.
 Ah, Gaunt, his blood was thine! that bed, that womb,
 That metal, that self-mould, that fashion'd thee,
 Made him a man; and though thou liv'st and breath'st, 25
 Yet art thou slain in him: thou dost consent
 In some large measure to thy father's death,
 In that thou see'st thy wretched brother die,
 Who was the model of thy father's life.
 Call it not patience, Gaunt; it is despair:
 In suffering thus thy brother to be slaughtered, 30
 Thou show'st the naked pathway to thy life,
 Teaching stern murder how to butcher thee.
 That which in mean men we entitle patience,
 Is pale cold cowardice in nobler breasts.
 What shall I say? to safeguard thine own life, 35
 The best way is to venge my Gloster's death.
Gaunt. God's is the quarrel; for God's substitute,
 His deputy anointed in His sight,
 Hath caus'd his death; the which, if wrongfully, 40
 Let heaven revenge, for I may never lift
 An angry hand against His minister.
Duchess. Where, then, alas, may I complain myself?
Gaunt. To God, the widow's champion and defence.
Duchess. Why, then, I will. Farewell, old Gaunt. 45
 Thou go'st to Coventry, there to behold
 Our cousin Hereford and fell Mowbray fight.
 O, sit my husband's wrongs on Hereford's spear,
 That it may enter butcher Mowbray's breast!
 Or, if misfortune miss the first career, 50
 Be Mowbray's sins so heavy in his bosom
 That they may break his foaming courser's back,
 And throw the rider headlong in the lists,
 A caitiff recreant to my cousin Hereford!
 Farewell, old Gaunt, thy sometimes brother's wife 55
 With her companion grief must end her life.
Gaunt. Sister, farewell; I must to Coventry.
 As much good stay with thee, as go with me!

3. Point out what the above passage contributes to the development and understanding of the play.

4. (a) Point out the passage in the quotation which is particularly open to criticism as being unnatural and undramatic, and show why it is so.

(b) Express clearly and concisely, in your own words, the meaning of lines 4 and 5.

(c) What theory of government is assumed within the limits of the quotation?

5. Discuss "they" (line 7), and the versification of line 44. Explain fully "model" (line 28), "naked" (line 31), "if misfortune miss the first career" (line 49), "thy sometimes brother's wife" (line 54).

6. With regard to *six* of the following passages name the speaker, the person or persons addressed, and indicate the circumstances :—

- (a) How sour sweet music is
When time is broke and no proportion kept!
So is it with the music of men's lives.
- (b) The purest treasure mortal times afford
Is spotless reputation.
- (c) I count myself in nothing else so happy
As in a soul remembering my good friends.
- (d) There is no virtue like necessity.
- (e) Well you deserve: they well deserve to have
That know the strong'st and surest way to get.
- (f) Within the hollow crown
That rounds the mortal temples of a king
Keeps death his court.
- (g) As in a theatre the eyes of men,
After a well-grac'd actor leaves the stage,
Are idly bent on him that enters next,
Thinking his prattle to be tedious.
- (h) I am sworn brother, sweet,
To grim necessity.

7. Show what peculiarities of Chaucer's tastes and character may be gathered from the *Prologue*.

8. Explain the italicized words in the following :—

Wel coude he fortunen the ascendent
Of his images for his pacient.
He knew the cause of everiche maladye,
Were it of hoot or cold, or moiste, or drye,
And where engendred, *and of what humour;*
He was a verray parfit practisour.
The cause yknowe, and of his harm the rote,
Anon he yaf the seke man his *bote.*
Ful redy hadde he his apothecaries
To sende him drogges, and his *letuaries*
For ech of hem made other for to winne;
Hir frendschipe nas nat newe to biginne.

Education Department, Ontario.

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THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

EUCLID.

Examiners: { A. R. BAIN, LL.D.
N. F. DUPUIS, M.A.
A. C. MCKAY, B.A.

1. The three medians of a triangle, taken in both length and direction, can form a triangle; and the area of the new triangle is three-fourths that of the original.

2. P is a fixed point and L is a fixed line not containing P . PA and PB are perpendicular to one another and meet L in A and B respectively. Show that the sum of the reciprocals of the squares on PA and PB is constant.

3. Draw a circle to pass through a given point and touch two given lines.

4. Show how to inscribe a circle in a triangle, and how to describe a circle about the same triangle. Euc. IV., 4 and 5.

5. (a) Describe a regular pentagon in a circle. Euc. IV., 11.

(b) Show that every diagonal of the pentagon is divided in extreme and mean ratio by another diagonal.

6. If two triangles have their three sides proportional they are equiangular (or similar), and have the equal angles opposite homologous sides in each. Euc. VI., 5.

7. Find a mean proportional between two given straight lines; and thence find a square equal to the sum of two given rectangles. Euc. VI., 13.

[OVER.]

8. Equiangular parallelograms are to each other as the rectangles contained by a pair of adjacent sides of each. Euc. VI., 23.

9. In a concyclic quadrilateral the sum of the rectangles on the sides taken in opposite pairs, is equal to the rectangle contained by the diagonals. Euc. VI., D, (Ptolemy's theorem).

10. $APBQ$ are four points in line such that $AP : PB = AQ : BQ$. If C be the middle point of AB , show that the square on AB is equal to four times the rectangle contained by CP and CQ .

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

HISTORY AND GEOGRAPHY.

Examiners : { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

1. Write an account of the New Learning, and the connection therewith of Colet, Erasmus, Warham and More. Show on what grounds the "Utopia" may claim to be considered the "typical book of the Revival."

2. "It is only by thoroughly realising the temper of the nation on religious and civil subjects, and the temper of the King, that we can understand the long Parliamentary conflict which occupied the whole of James's reign. But to make its details intelligible we must briefly review the relations between the two Houses and the Crown."

Sketch the history of the conflict referred to in this extract, first describing clearly and concisely the 'relations', the 'temper of the nation', and the 'temper of the King'. Give also in connection with the foregoing a brief account of the proceedings which led to the dismissal of Coke.

3. "He was the first English statesman who discovered and applied to the political circumstances around him what may be called the doctrine of constitutional proportion."

Sketch briefly the life and character of the statesman who is the subject of the above remark, and give a clear account of the 'circumstances' and the 'doctrine' therein referred to.

4. Describe the growth of the freedom of the Press during the period prescribed for this examination (1492—1688), noting any publications which had the effect of retarding, or which were meant to advance, the cause of such freedom.

[OVER.]

5. Describe the course of affairs in England from the "Invitation" to the calling of the "Convention". What part did the English Aristocracy play in the revolution of 1688?

6. Give a brief account of any *three* of the following, with an estimate of their influence on the history of their times:—Bacon, Burleigh, Clarendon, Ashley Cooper, Wentworth, Laud, Monmouth, Hobbes, Locke, Jeremy Taylor.

7. Locate, and write brief historical notes on any *ten* of the following:—

- | | |
|------------------|-----------------|
| (a) Antwerp, | (k) Lyme, |
| (b) Breda, | (l) Naseby, |
| (c) Cadiz, | (m) Nottingham, |
| (d) Calais, | (n) Rochelle, |
| (e) Carisbrook, | (o) Santa Cruz, |
| (f) Drogheda, | (p) Sedgemoor, |
| (g) Dunbar, | (q) Taunton, |
| (h) Dunkirk, | (r) Torbay, |
| (i) Fotheringay, | (s) Worcester, |
| (j) Loch Leven, | (t) Zutphen. |

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

TRIGONOMETRY.

Examiners: $\begin{cases} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{cases}$

1. (a) Define those units of measurement called respectively the degree, the grade, the radian; and show the relation of each to two right angles.

(b) The sum of the measure of a certain angle in degrees and twice its measure in radians is $23\frac{2}{7}$; find its measure in degrees ($\pi = \frac{22}{7}$).

2. (a) Express in terms of its cosine the other trigonometrical functions of the angle x .

(b) Given $2 \sin^2 45^\circ = 1$ and $\sin 30^\circ = \frac{1}{2}$; find $\tan 15^\circ$.

3. (a) Prove geometrically that

$$\cos(A-B) = \cos A \cos B + \sin A \sin B.$$

(b) If $\cos(A-C) \cos B = \cos(A-B+C)$, show that $\tan A$, $\tan B$ and $\tan C$ are in harmonical progression.

4. Prove the following identities:

(a) $\tan \frac{x}{2} = \frac{1 - \cos x}{\sin x}.$

(b) $\cos A + \cos 3A + \cos 5A + \cos 7A = 4 \cos A \cos 2A \cos 4A.$

(c) $\cos(A+B) - \sin(A-B) = 2 \sin\left(\frac{\pi}{4} - A\right) \cos\left(\frac{\pi}{4} - B\right).$

[OVER.]

5. Define the logarithm of a number and prove

$$(a) \quad \log_a \sqrt{\frac{n}{m}} = \frac{1}{2} (\log_a n - \log_a m).$$

$$(b) \quad 6 \log_a \frac{2}{3} + 4 \log_a \frac{9}{10} + 2 \log_a \frac{25}{6} = 0.$$

6. In the triangle ABC , show that

$$(a) \quad \tan \frac{1}{2}(A-B) = \frac{a-b}{a+b} \cot \frac{C}{2}.$$

(b) $p = \frac{c \sin A \sin B}{\sin C}$, if p denote the perpendicular from C upon c .

7. From the point A on a plane the angular elevation of a tower on the same plane is β . From the point D which is c feet nearer the base of the tower the angular elevation is γ . Show that the height of the tower is

$$\frac{c}{\cot \beta - \cot \gamma}.$$

8. In any triangle, ABC , prove that

(a) $R = \frac{abc}{4\Delta} = \frac{c}{2 \sin C}$, where R is the radius of the circumcircle, and Δ is the area of the triangle.

$$(b) \quad \Delta = 2 R^2 \sin A \sin B \sin C.$$

9. At the foot of a mountain the elevation of its summit is 45° . Ascending the face of the mountain a mile on a slope of 15° , the elevation is found to be 60° . Find the height in

miles; given $\sin 15^\circ = \frac{1/\sqrt{3} - 1}{2\sqrt{2}}$, $\sin 30^\circ = \frac{1}{2}$.

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ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ENGLISH COMPOSITION.

Examiners: { W. J. ALEXANDER, PH.D.
A. CARRUTHERS, B.A.
W. TYTLER, B.A.

NOTE.—*The candidate will write on ONE, and only one, of the following themes :*

1. Japan.
2. The Future of Canada.
3. Navigators of Queen Elizabeth's Time.
4. Does Education unfit for Mechanical and Agricultural Pursuits?
5. Bolingbroke.
6. A Botanical Ramble in Spring.

(Any names of persons or places the candidate uses must be fictitious, not real names.)

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

FRENCH AUTHORS.

Examiners : { L. E. HORNING, PH.D. .
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

Translate into English :

1. Les physionomies des deux enfants ne différait pas moins que leur costume. Celle du premier était délicate et distinguée ; l'œil d'un bleu limpide, la peau fine, les lèvres souriantes lui donnaient un charme d'innocence et de bonheur ; les traits du second, au contraire, avaient une certaine rudesse ; le regard était vif et mobile, le teint bruni, la bouche moins riante que narquoise ; tout indiquait l'intelligence aiguisée par une précoce expérience ; il marchait avec confiance au milieu des rues que les voitures sillonnaient, et suivait sans hésitation leurs mille détours.

J'appris de lui qu'il apportait tous les jours le dîner de son père, alors occupé sur la rive gauche de la Seine ; la responsabilité dont il était chargé l'avait rendu attentif et prudent. Il avait reçu ces dures mais puissantes leçons de la nécessité que rien n'égale, ni ne remplace. Malheureusement les besoins du pauvre ménage l'avaient forcé à négliger l'école, et il paraissait le regretter, car souvent il s'arrêtait devant les gravures et demandait à son compagnon de lui en lire les inscriptions.

2. Il habitait dans le faubourg une vieille maison où logeaient des ouvriers aussi pauvres que lui, mais moins abandonnés. Une seule de ses voisines vivait sans famille, dans une petite mansarde où pénétraient la pluie et le vent. C'était une jeune fille pâle, silencieuse, sans beauté, et que recommandait seulement sa misère résignée. On ne la voyait jamais adresser la parole à une autre femme ; aucun chant n'égayait sa mansarde. Enveloppée dans un morne abattement comme dans une sorte de linceul, elle travaillait sans ardeur et sans distraction. Sa langueur avait touché

[OVER.]

Maurice; il essaya de lui parler; elle répondit avec douceur, mais brièvement. Il était aisé de voir que son silence et sa solitude lui étaient plus chers que la bienveillance du petit bossu; il se le tint pour dit et redevint muet.

3. —Tu n'as peut-être jamais pensé à ce qu'est que la patrie, reprit-il, en me posant une main sur l'épaule; c'est tout ce qui t'entoure, tout ce qui t'a élevé et nourri, tout ce que tu as aimé! Cette campagne que tu vois, ces maisons, ces arbres, ces jeunes filles qui passent là en riant, c'est la patrie! Les lois qui te protègent, le pain qui paie ton travail, les paroles que tu échanges, la joie et la tristesse qui te viennent des hommes et des choses parmi lesquels tu vis, c'est la patrie! La petite chambre où tu as vu autrefois ta mère, les souvenirs qu'elle t'a laissés, la terre où elle repose, c'est la patrie! Figure-toi, mon fils, tes droits et tes devoirs, tes affections et tes besoins, tes souvenirs et ta reconnaissance, réunis tout ça sous un seul nom, et ce nom-là sera la patrie.

4. HENRIETTE, *qui a ouvert un journal*.—Tiens, papa qui est dans le journal!

PERRICHON. — Comment! Je suis dans le journal?

HENRIETTE. — Lis toi-même...là... (*Elle lui donne le journal.*)

PERRICHON.—Vous allez voir que je suis tombé du jury! (*Lisant.*) “On nous écrit de Chamouny....

TOUS.—Tiens! (*Ils se rapprochent.*)

PERRICHON, *lisant*.—Un événement qui aurait pu avoir des suites déplorables vient d'arriver à la mer de Glace.....M. Daniel S.....a fait un faux pas et a disparu dans une de ces crevasses si redoutées des voyageurs. Un des témoins de cette scène (qu'il nous permette de le nommer.)” (*Parlé.*) Comment donc! si je le permets! (*Lisant.*) “M. Perrichon, notable commerçant de Paris et père de famille, n'écoutant que son courage, et au mépris de sa propre vie, s'est élancé dans le gouffre.” (*Parlé.*) C'est vrai, “et après des efforts inouis, a été assez heureux pour en retirer son compagnon. Un si admirable dévouement n'a été surpassé que par la modestie de M. Perrichon, qui s'est dérobé aux félicitations de la foule émue et attendrie.....Les gens de cœur de tous les pays nous sauront gré de leur signaler un pareil trait!”

DANIEL, *à part*—Trois francs la ligne!

PERRICHON, *relisant lentement la dernière phrase*.—“Les gens de cœur de tous les pays nous sauront gré de leur signaler un pareil trait.” (*A Daniel, très ému.*) Mon ami....mon enfant! embrassez-moi! (*Ils s'embrassent.*)

DANIEL, *à part*. — Décidément, j'ai la corde.

PERRICHON, *montrant le journal*. — Certes, je ne suis pas un révolutionnaire, mais je le proclame hautement, la presse a du bon ! (*Mettant le journal dans sa poche et à part.*) J'en ferai acheter dix numéros.

5. Mme. de La Tour lui dit : “ Mon fils, si vous nous quittez, qu'allons-nous devenir ? ”

— Il répéta en tremblant ces mots : “ Mon fils.....mon fils..... Vous, ma mère ! lui dit-il, vous qui séparez le frère d'avec la sœur ! * * * * * Tous deux, élevés sur vos genoux, nous avons appris de vous à nous aimer ; tous deux nous nous le sommes dit mille fois. Et maintenant, vous l'éloignez de moi ! Vous l'envoyez en Europe, dans ce pays barbare qui vous a refusé un asile, et chez des parents cruels qui vous ont vous-même abandonnée. Vous me direz : Vous n'avez plus de droits sur elle ; elle n'est pas votre sœur. Elle est tout pour moi, ma richesse, ma famille, ma naissance, tout mon bien. Je n'en connais plus d'autre. Nous n'avons eu qu'un toit, qu'un berceau, nous n'aurons qu'un tombeau. Si elle part, il faut que je la suive. Le gouverneur m'en empêchera ? M'empêchera-t-il de me jeter à la mer ? Je la suivrai à la nage. La mer ne saurait m'être plus funeste que la terre. Ne pouvant vivre ici près d'elle, au moins je mourrai sous ses yeux, loin de vous. Mère barbare ! femme sans pitié ! puisse cet Océan où vous l'exposez ne jamais vous la rendre ! puissent ces flots vous rapporter mon corps, et le roulant avec le sien parmi les cailloux de ces rivages, vous donner par la perte de vos deux enfants un sujet éternel de douleur.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

FRENCH GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE.—*The extract is given merely as a basis for the questions which follow, and is not to be translated.*

Placé dès l'âge de douze ans chez un de ces collectionneurs-commerçants qui se sont donné le nom de *naturalistes*, parce qu'ils mettent la création sous verre pour la débiter en détail, mon père avait toujours mené une vie pauvre et laborieuse. Levé avant le jour, tour à tour garçon de magasin, commis, 5 ouvrier, il devait suffire seul à tous les travaux d'un commerce dont son patron récoltait tous les profits. A la vérité, celui-ci avait une habileté spéciale pour faire valoir l'œuvre des autres. Incapable de rien exécuter, nul ne savait mieux vendre. Ses paroles étaient un filet dans lequel on se trouvait pris avant de 10 l'avoir aperçu. Du reste, ami de lui seul, regardant le producteur comme son ennemi, et l'acheteur comme sa conquête, il les exploitait tous deux avec cette inflexible persistance qu'enseigne l'avarice.

1. Give the exact force of *levé* (line 5), and of *rien* (line 9).

2. *Travaux*. Give the other plural of *travail*, and distinguish the meaning of the two forms.

3. *Ces, celui-ci*. Distinguish carefully between demonstrative adjectives and demonstrative pronouns. Give the form for the masculine singular in every case, with one example of each to show its proper use. Translate the examples. [OVER.]

4. *Donné* (line 2). Explain the reason for the participle's taking this form.

5. *Avant de l'avoir aperçu*. Rewrite this clause, substituting *avant que* for *avant* and making all other necessary changes.

6. Write the first person plural of the past definite of *placé* (line 1), *mettent* (line 3), *devait* (line 6), *suffire* (line 6), *savait* (line 9), *vendre* (line 9).

7. Write the third person plural of the future, and of the present subjunctive of *mené* (line 4), *suffire* (line 6), *faire* (line 8), *valoir* (line 8), *savait* (line 9), *aperçu* (line 11).

8. *Qu'enseigne l'avarice* (line 14). Account for the order of words in this clause.

B.—(Composition.)

NOTE.—*Numerals must be written in words, not in figures.*

9. Translate into French :

- (a) We must take care not to do that.
- (b) He had to stop more than once ; he was so tired.
- (c) She will have to read again ; we could not hear her.
- (d) I should not have to go to town, if he were willing to go.
- (e) We do not think it is necessary for you to speak to her about it.

10. Translate into French :

- (a) You will not succeed in your examinations, unless you study more diligently.
- (b) We were afraid he would come before we were ready to start.
- (c) They would be afraid we were not coming, if we were to wait longer.
- (d) She had not finished working, although it was nearly midnight.
- (e) Those gentlemen have gone away without my speaking to them.

11. Translate into French :

- (a) Our cousins will come and visit us in the month of August.

- (b) I had just received a letter from France that afternoon.
- (c) If he should happen to arrive before half-past twelve (noon) tell him to wait.
- (d) They will never come back, as long as you are angry at them.
- (e) What you have agreed upon will never suit me or my friends.

12. Translate into French :

- (a) The invitation you have received for the eighth is from Mrs. de Thou.
- (b) The young lady we heard singing on the eleventh is Miss Drouet.
- (c) The five hundred dollars you lost a fortnight ago have been found again.
- (d) The ten hours' sleep I had last night made me feel better.
- (e) The gentleman we met at your house has grown stouter since then.

13. Translate into French :

A few years ago a professor, who is now at a college in the United States, came to Canada to be a professor in one of our universities. At that time he was not yet thirty, and, although he wore a beard, he did not appear to be at all old. Shortly after his arrival in Canada, he went into a building belonging to the college to get some information he wanted. He asked a great many questions, so the student who was talking to him (a third year man he was) said to him at length: "Then you have come down to attend college for the first time?" After a moment's hesitation the answer came: "Yes, but I am going to deliver the lectures." And then only did the student know what a mistake he had made.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

GERMAN AUTHORS.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.

Translate into English :

1. *Bolz* (am Tische links Briefe schnell öffnend, durchsehend und mit Bleistift bezeichnend). Ich habe die Revision bereits gemacht, alter Schelm.

Müller. Nicht ganz. Hier unten ist noch das Mannigfaltige, welches Herr *Bellmaus* den Lesern gegeben hat.

Bolz. (liest in der Zeitung) Wäsche vom Boden gestohlen—Concert, Concert, Vereinsitzung, Theater—Alles in Ordnung—Neuerfundene Locomotive; die große Seeschlange gesehen. (Aufspringend) Alle Wetter, kommt der wieder mit der alten Seeschlange! ich wollte, sie würde ihm als Gelee gekocht und er müßte sie kalt aufessen. (eilt zur Thür rechts). *Bellmaus*, Ungeheuer, komm hervor!

Bellmaus (von rechts eintretend, die Feder in der Hand). Was gibt's? Wozu der Lärm?

Bolz (feierlich). *Bellmaus*, als wir Dir die Ehre erwiesen, Dich mit Verfertigung der Rippesachen für dieses Blatt zu betrauen, da war die Meinung nicht, daß Du die ewige große Seeschlange durch die Spalten unserer Zeitung wälzen solltest! — — Wie konntest Du die abgedroschene Lüge wieder hineinsetzen?

Bellmaus. Sie paßte gerade, es fehlte an sechs Zeilen.

Bolz. Das ist eine Entschuldigung, aber keine gute. Erfinde Deine eignen Geschichten, wozu bist Du Journalist? Mache ein kleines „Eingesandt,“ z. B. eine Betrachtung über Menschenleben im allgemeinen, oder über das Umherlaufen von Hunden auf der Straße, oder suche eine haarsträubende Geschichte heraus, vielleicht einen Mordmord aus Höflichkeit, oder wie ein Hamster sieben schlafende Kinder erbiten hat, oder so etwas. — Es gibt so vieles, was geschieht, und so ungeheuer vieles, was nicht geschieht, daß es einem ehrlichen Zeitungsschreiber nie an Neuigkeiten fehlen darf.

2. Das Ausbleiben der feindlichen Flotte in diesem entscheidenden Augenblick belebte aufs neue seine Hoffnung.

[OVER.]

Noch schien der schlimme Zustand seiner Brücke den Feinden ein Geheimnis zu sein, und war es gleich nicht möglich, das Werk so vieler Monate in wenigen Stunden wieder herzustellen, so war schon vieles gewonnen, wenn man auch nur den Schein davon zu erhalten wusste. Alles musste daher Hand ans Werk legen, die Trümmer wegzuschaffen, die umgestürzten Balken wieder aufzurichten, die zerbrochenen zu ersetzen, die Lücken mit Schiffen auszufüllen. Der Herzog selbst entzog sich der Arbeit nicht, und seinem Beispiel folgten alle Offiziere.

B.

Translate into English :

Ein alter Mensch stand in der Neujahrsnacht am Fenster und schaute mit dem Blicke einer langen Verzweiflung auf zum unbeweglichen, ewig blühenden Himmel und herab auf die stille, reine, weiße Erde, worauf jetzt niemand so freudig und schlaflos war als er. Denn sein Grab stand nahe bei ihm; es war bloß vom Schnee des Alters, nicht vom Grün der Jugend verdeckt, und er brachte aus dem ganzen, reichen Leben nichts mit als Irrthümer, Sünden und Krankheiten, einen verheerten Körper, eine verödete Seele, die Brust voll Gift und ein Alter voll Reue.

Seine schönen Jugendtage wandten sich heute als Gespenster um, und zogen ihn wieder vor den holden Morgen hin, wo ihn sein Vater zuerst auf den Scheideweg des Lebens gestellt hatte, der rechts auf der Sonnenbahn der Tugend in ein weites, ruhiges Land voll Licht und Ernten und voll Engel bringt, und welcher links in die Maulwurfsgänge des Lasters hinabzieht, in eine schwarze Höhle voll heruntertropfenden Giftes, voll zischender Schlangen und finsterner, schwüler Dämpfe.

Ach, die Schlangen hingen um seine Brust, und die Gifttropfen auf seiner Zunge, und er wusste nun, wo er war!

Sinnlos und mit unaussprechlichem Gram rief er zum Himmel hinauf: „Gieb mir meine Jugend wieder! O Vater, stelle mich auf den Scheideweg wieder, damit ich anders wähle!“

Er konnte es nicht mehr sehen;—er verhüllte das Auge; tausend heiße Thränen strömten versiegend in den Schnee;—er seufzte nur noch leise, trostlos und sinnlos: „Komme wieder, Jugend, komme wieder!“—Und sie kam wieder; denn er hatte nur in der Neujahrsnacht so fürchterlich geträumt. Er war noch ein Jüngling; nur seine Verirrungen waren kein Traum gewesen. Aber er dankte Gott, daß er, noch jung, in den schmutzigen Gängen des Lasters umkehren und sich auf die Sonnenbahn zurückbegeben konnte, die ins reine Land der Ernten leitet.

Kehe mit ihm um, junger Leser, wenn du auf seinem Irrwege stehst! Dieser schreckende Traum wird künftig dein Richter werden; aber, wenn du einst jammervoll rufen würdest: „Komme wieder, schöne Jugend!“ so würde sie nicht wiederkommen.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

GERMAN GRAMMAR AND COMPOSITION.

Examiners: { L. E. HORNING, PH.D.
W. H. VAN DER SMISSEN, M.A.
A. H. YOUNG, M.A.

A.—(Grammar.)

NOTE.—*The extracts are given merely as a basis for the questions which follow, and are not to be translated.*

(a) OLDENDORF (*lächelnd*). Du bist ein gemeiner Intrigant.

BOLZ (*ihn vom Stuhle nötigend*). Bitte, du findest Papier und Tinte dort. Komm, mein Schatz, komm. (*begleitet ihn zur Thür links, Oldendorf ab. Bolz hineinrufend*). Willst du eine Cigarre haben? Eine alte Ugues? (*zieht ein Cigarren-Etui aus der Tasche*) Nicht?—Schreibe nur nicht zu wenig, es soll ein Hauptartikel werden! (*schliesst die Thür, ruft in die Thür rechts*). Der Professor schreibt den Artikel selbst, sorgen Sie, dass ihn Niemand stört.—(*nach dem Vordergrund*) Das wäre abgemacht.—Adelheid hier in der Stadt?—Da will ich doch gleich zu ihr!—Halt, immer hübsch kaltblütig. Du, mein alter Bolz, bist nicht mehr der braune Bursch, aus dem Pastorgarten, und wenn du's noch bist, *sie* ist längst eine andere geworden. Das Gras ist gewachsen über dem Grabe einer gewissen kindischen Neigung. Wozu trommelst du jetzt auf einmal so unruhig, liebe Seele? Sie ist hier in der Stadt gerade so weit von dir entfernt, als auf ihrem Gute. (*sich setzend, mit einem Bleistift spielend*). Nichts über kaltes Blut! brummte der Salamander, als er im Ofenfeuer sas.

[OVER.]

(b) Noch ehe Gent an den König überging, waren die Städte Vilvorden und Herentals in die Hände der Spanier gefallen, auch die Blockhäuser unweit dem Flecken Willebroek von ihnen besetzt worden, wodurch Antwerpen von Brüssel und Mecheln abgeschnitten wurde. Der Verlust aller dieser Plätze, der in so kurzer Zeit erfolgte, entrisz den Antwerpen jede Hoffnung eines Succurses aus Brabant und Flandern, und schränkte alle ihre Aussichten auf den Beistand ein, der aus Seeland erwartet wurde, und welchen zu verhindern der Herzog von Parma nunmehr die ernstlichsten Anstalten machte.

1. Give :

- (a) the *nom. plural* of *Intrigant*, *Schatz*, *Bursch*, *Gras*, *Garten* ;
- (b) the *dat. sing.* of *Niemand*, *Bursch* ;
- (c) the German for *with long, green grass*.

2. Explain the use of the *pronoun of the second person* in extract (a), and distinguish between the general use of *du* and *sie*.

3. Give the *3rd pers. sing. pres. indic.* of *komm*, *gewachsen*, *sasz*, *gefallen*, *entrisz*.

4. Write notes on :

- (a) the use of *tense* and *mood* in *findest* and *Das wäre abgemacht* ;
- (b) the form of the verb in *Schreibe nur nicht zu wenig*.

5. *Waren . . . gefallen* (in b). Give rules for the use of *sein* as auxiliary. Illustrate as far as possible.

6. Make a list of the inseparable prefixes in extract (b) explaining the force of each.

7. Write a note on word-order in German sentences, illustrating from and also noting any peculiarities in the extracts.

8. Indicate the accented syllable of *Intrigant*, *hineinruffend*, *Artikel*, *Vordergrund*, *Verlust*, *Aussichten*.

B.—(Composition.)

9. Translate into German :

- (a) I wanted to go to Toronto yesterday but could not as it was rainy.
- (b) You should have answered my letter immediately after receiving it.
- (c) Where are you off to now with your gun? Are there squirrels (*Eichhörnchen*) to be found in the woods?
- (d) What was he to do? Neither his brother nor his friend would help him, and he dared not call any one.
- (e) I was very glad to see your father and to hear from him that you were well and happy.

10. Translate into German :

- (a) He arrived here last Wednesday at 2:35 P.M.
- (b) He hopes to reach England in a week or ten days if the weather is fine.
- (c) Did you hear it strike? I wonder if it was three or four! My watch is at the watchmaker's.
- (d) When do you expect your brother? Tomorrow or the day after? Oh! not till next week.
- (e) Every day, in fact, oftentimes every hour in the day, my little friend makes me a visit.

11. Translate into German :

- (a) Doctor Bolz! I told the gentleman twice that you were not at home.
- (b) But he said he must see you and would wait for you. What could I do?
- (c) Well, I suppose it was hard to drive the poor man away. In which room is he?
- (d) Will you allow me to use your pen a moment? I have left out a word.
- (e) What happened your friend this morning? She was ten minutes late at the lesson.

12. Translate into German :

Freytag's comedy which we read this year is one of his best known and most popular works, as well as one of the

very best plays in all German Literature. The chief characters are the retired Colonel Berg and his daughter Ida, her friend Miss Adelheid Runeck, also the two editors and intimate friends, Prof. Oldendorf and Dr. Bolz. The professor was in love with Ida and she with him, and Dr. Bolz had in his youth given his heart to Miss Adelheid, who still retained possession of it. But the course of true love never runs smooth, as the proverb has it, nor did it in this case. An election in which the professor was the Liberal candidate, and the colonel that of the government, caused the honest but hot-tempered colonel to forbid the professor his house. After the election, however, which the professor won, through the good offices and clever management of Miss Adelheid, there was a gradual reconciliation between all parties and, in the end, the professor and Ida are made happy, nor are Dr. Bolz and Miss Adelheid any less so.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

LATIN AUTHORS.

Examiners : { W. DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

Translate :—

(a) Haec directa percontatio ac denuntiatio belli magis ex dignitate populi Romani visa est quam de foederum iure verbis disceptare, cum ante, tum maxime Sagunto excisa. Nam si verborum disceptationis res esset, quid foedus Hasdrubalis cum Lutatii priore foedere, quod mutatum est, comparandum erat, cum in Lutatii foedere diserte additum esset, ita id ratum fore, si populus censuisset, in Hasdrubalis foedere nec exceptum tale quicquam fuerit, et tot annorum silentio ita vivo eo comprobatum sit foedus, ut ne mortuo quidem auctore quicquam mutaretur? Quanquam, etsi priore foedere staretur, satis cautum erat Saguntinis, sociis utrorumque exceptis; nam neque additum erat “iis, qui tunc essent,” nec, “ne qui postea assumerentur.”

(b) Consulium designatorum alter Flaminius, cui eae legiones, quae Placentiae hibernabant, sorte evenerant, edictum et litteras ad consulem misit, ut is exercitus Idibus Martiis Arimini adesset in castris. Huic in provincia consulatum inire consilium erat memori veterum certaminum cum patribus, quae tribunus plebis et quae postea consul prius de consulatu, qui abrogabatur, dein de triumpho habuerat, invisus etiam patribus ob novam legem, quam Q. Claudius tribunus plebis adverso senatu atque uno patrum adiuvante C. Flaminio tulerat.

1. *Cum ante, tum maxime.* What is the general rule for the use of *cum tum*?

2. Parse fully *ratum fore, fuerit, staretur, iis.*

[OVER.]

3. *Utrorumque*. When is *uterque* used in the plural?

4. Explain briefly and clearly the meaning of:

(a) *Consul designatus*.

(b) *Certamina, quae tribunus plebis habuerat*.

(c) *Certamina, quae postea de consulatu, qui abrogabatur, habuerat*.

(d) *Latinarum feriarum mōra*.

(e) *Praerogativa militaris*.

B.

Translate:—

(a) Non his iuventus orta parentibus
infecit aequor sanguine Punico,
Pyrrhumque et ingentem cecidit
Antiochum Hannibalemque dirum;
sed rusticorum mascula militum
proles, Sabellis docta ligonibus
versare glebas et severae
matris ad arbitrium recisos
portare fustes, sol ubi montium
mutaret umbras et iuga demeret
bobus fatigatis, amicum
tempus agens abeunte curru.
damnosa quid non imminuit dies?
aetas parentum peior avis tulit
nos nequiores, mox daturos
progeniem vitiosiore.

(b) Non incisa notis marmora publicis,
per quae spiritus et vita redit bonis
post mortem ducibus, non celeres fugae
reiectaeque retrorsum Hannibalis minae,
non incendia Karthaginis impiae
eius, qui domita nomen ab Africa
lucratus rediit, clarius indicant
laudes quam Calabrae Pierides: neque,
si chartae sileant quod bene feceris,
mercedem tuleris. quid foret Iliae
Mavortisque puer, si taciturnitas
obstaret meritis invida Romuli?
ereptum Stygiis fluctibus Aeacum

virtus et favor et lingua potentium
vatum divitibus consecrat insulis.

1. Scan the first stanza of (a) and the first line of (b).
2. Parse fully, *demeret, avis*.
3. Explain briefly the force of the epithets *ingentem, mascula, severae, damnosa, Calabriae, invida, potentium*.
4. *Dirum*. Illustrate from Livy the common Roman view of the character of Hannibal.
5. What evidence from the first six odes of Bk. III. of the date of its composition?
6. Show how the last stanza of (a) sums up the train of thought which runs through the first six odes of Book III.

C.

Translate :—

Primis tenebris silentio mota castra ; boves aliquanto ante signa acti. Ubi ad radices montium viasque angustas ventum est, signum extemplo datur, ut accensis cornibus armenta in adversos concitentur montes ; et metus ipse relucens flammae ex capite calorque iam ad vivum ad imaue cornuum adveniens velut stimulatos furore agebat boves. Quo repente discursu, haud secus quam silvis montibusque accensis, omnia circa virgulta visa ardere, capitumque irrita quassatio excitans flammam hominum passim discurrentium speciem praebebat. Qui ad transitum saltus insidendum locati erant, ubi in summis montibus ac super se quosdam ignes conspexere, circumventos se esse rati praesidio excessere. Qua minime densae micabant flammae, velut tutissimum iter petentes summa montium iuga, tamen in quosdam boves palatos a suis gregibus inciderunt. Et primo cum procul cernerent, veluti flammam spirantium miraculo attoniti constiterunt ; deinde ut humana apparuit fraus, tum vero insidias rati esse, cum maiore tumultu concitant se in fugam. Levi quoque armaturae hostium incurrere ; ceterum nox aequato timore neutros pugnam incipientes ad lucem tenuit. Interea toto agmine Hannibal traducto per saltum, et quibusdam in ipso saltu hostium oppressis, in Agro Allifano posuit castra.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

LATIN GRAMMAR AND COMPOSITION.

Examiners : { W. DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

1. *Putavit urbem captum iri.* Explain the syntax of (a) *urbem*, (b) *captum*, (c) *iri*. Express in Latin, without using the passive infinitive.

2. Explain the syntax or the use of the italicised words in the following :

- (a) *Quid est cur illi vobis comparandi sint?*
- (b) *Pro Italia vobis est pugnandum.*
- (c) *Victi amplius ducenti ceciderunt.*
- (d) *Taedebat multos imperii Punici.*
- (e) *In eos versa peditum acies haud dubium fecit quin, nisi firmata extrema agminis fuissent, accipienda clades.*
(Explain the use of the periphrastic form here.)

3. Translate into Latin :

- (a) He did not doubt that you would be obeyed.
- (b) Do you think that such an enterprise should be lightly undertaken?
- (c) Nor am I afraid, soldiers, that anyone will say that I am speaking thus for the purpose of encouraging you (use *causā*).
- (d) Do not waste time in sending embassies.
- (e) O that I may be a false prophet!
- (f) Hannibal, hearing this, gave the signal for immediate departure.
- (g) If Hamilcar were alive, we should be at war with Rome.
- (h) "Go forward upon thy way," said the youth; "and inquire no further." (Use *indirect narration*).

[OVER.]

4. Translate into Latin :

Such were the preparations made by the great city of Rome for the defence of these unfortunate people ; instead of sending a fleet or an army to their aid, she was disputing about the violation of laws and the infringement of treaties. But such apparently heartless desertion and betrayal entailed the usual consequences : she forfeited, for the time being at least, the confidence of her loyal allies in Spain. Meantime the threatened town had with the utmost alacrity set about making preparations on its own account for the approaching siege. It had a large population and—thanks to its maritime and agricultural products—considerable wealth ; and, before the enemy could invest it with his troops, large stores of provisions and a strong force of infantry and cavalry, supplied with siege-engines and all known munitions of war, had been purchased or collected from the allies and brought into the place.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY
HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP
EXAMINATION.

GREEK AUTHORS.

Examiners : { W. DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

Translate :

(a) ὦ Ὀδυσσεῦ, τὸ μὲν οὐ τί σ' εἴσκομεν εἰσορόωντες
ἡπεροπῆά τ' ἔμεν καὶ ἐπὶ κλοπον, οἷά τε πολλοὺς
βόσκει γαῖα μέλαινα πολυσπερέας ἀνθρώπους
ψεύδεά τ' ἀρτύνοντας, ὅθεν κέ τις οὐδὲ ἴδοιτο·
σοὶ δ' ἔπι μὲν μορφῇ ἐπέων, ἐνὶ δὲ φρένες ἐσθλαί,
μῦθον δ' ὥς ὅτ' αἰοιδὸς ἐπισταμένως κατέλεξας,
πάντων τ' Ἀργείων σέο τ' αὐτοῦ κήδεα λυγρά.

(b) ὦς ἐφάμην, ψυχὴ δὲ ποδώκεος Αἰακίδαο
φοίτα μακρὰ βιβᾶσα κατ' ἀσφοδελὸν λειμῶνα,
γηθοσύνη ὃ οἱ υἱὸν ἔφην ἀριδείκετον εἶναι.

Αἰ δ' ἄλλαι ψυχαὶ νεκῶν κατατεθνηώτων
ἔστασαν ἀχνύμεναι, εἶροντο δὲ κήδε' ἐκάστη.
οἷη δ' Αἴαντος ψυχὴ Τελαμωνιάδαο
νόσφιν ἀφεστήκει, κεχολωμένη εἵνεκα νίκης,
τήν μιν ἐγὼ νίκησα δικαζόμενος παρὰ νηυσὶ
τεύχεσιν ἀμφ' Ἀχιλλῆος· ἔθηκε δὲ πότνια μήτηρ.
παῖδες δὲ Τρώων δίκασαν καὶ Παλλὰς Ἀθήνη.
ὥς δὴ μὴ ὄφελον νικᾶν τοιῶδ' ἐπ' ἀέθλῳ.

HOMER, *Odyssey*, XI.

1. Parse fully ἔπι in extract (a), βιβᾶσα, Αἰακίδαο, οἷ, ἔστασαν, ὄφελον in extract (b).

2. Scan the first three lines of extract (b).

(OVER.)

3. (a) Explain the case construction of τὸ, τί in extract (a); μακρὰ, ὅ, τήν in extract (b).

(b) State the Homeric use of the article as shown by τὸ in extract (a); αἱ, τήν in extract (b).

(c) Give the Attic prose equivalents of εἰσορόωντες, ἔμεν, ὥς, φοίτα, μιν, νηυσὶ.

4. Compare and contrast Homer's and Socrates' conceptions of the condition of the dead?

B.

Translate :

Ἴσως ἂν οὖν δόξειεν ἄτοπον εἶναι, ὅτι δὴ ἐγὼ ἰδίᾳ μὲν ταῦτα συμβουλεύω περιῶν καὶ πολυπραγμονῶ, δημοσίᾳ δὲ οὐ τολμῶ ἀναβαίνων εἰς τὸ πλῆθος τὸ ὑμέτερον συμβουλεύειν τῇ πόλει. τούτου δὲ αἷτιόν ἐστιν ὃ ὑμεῖς ἐμοῦ πολλάκις ἀκηκόατε πολλαχοῦ λέγοντος, ὅτι μοι θεῖόν τι καὶ δαιμόνιον γίγνεται [φωνή], ὃ δὴ καὶ ἐν τῇ γραφῇ ἐπικωμωδῶν Μέλητος ἐγράψατο. ἐμοὶ δὲ τοῦτ' ἐστὶν ἐκ παιδὸς ἀρξάμενον φωνὴ τις γιγνομένη, ἣ ὅταν γένηται, αἰὲ ἀποτρέπει με τοῦτο, ὃ ἂν μέλλω πράττειν, προτρέπει δὲ οὐποτε. τοῦτ' ἐστὶν ὃ μοι ἐναντιοῦται τὰ πολιτικὰ πράττειν. καὶ παγκάλως γέ μοι δοκεῖ ἐναντιοῦσθαι.

PLATO, *Apology*.

5. (a) ταῦτα (line 1). What is meant?

(b) ἐπικωμωδῶν. Explain the reference.

(c) τὰ πολιτικὰ πράττειν. Give concisely Socrates' experience of public life as described in the next chapter.

6. Explain the construction of ἐμοῦ and τοῦτο. What would ἀποτρέπει ... ὃ ἂν μέλλω become in secondary sequence?

C.

Translate :

ΣΩ. Ἐκ τούτων δὴ ἄθρει. ἀπιόντες ἐνθένδε ἡμεῖς μὴ πείσαντες τὴν πόλιν πότερον κακῶς τινὰς ποιούμεν, καὶ ταῦτα οὐς ἤκιστα δεῖ, ἢ οὐ; καὶ ἐμμένομεν οἷς ὡμολογήσαμεν δικαίοις οὐσιν ἢ οὐ;

ΚΡ. Οὐκ ἔχω, ὦ Σώκρατες, ἀποκρίνασθαι πρὸς ὃ ἐρωτᾷς. οὐ γὰρ ἐννοῶ.

ΣΩ. Ἄλλ' ὧδε σκόπει. εἰ μέλλουσιν ἡμῖν ἐνθένδε εἴτε ἀποδιδράσκειν, εἴθ' ὅπως δεῖ ὀνομάσαι τοῦτο, ἐλθόντες οἱ νόμοι καὶ τὸ κοινὸν τῆς πόλεως ἐπιστάντες ἔρουντο. εἰπέ μοι, ὦ Σώκρατες, τί ἐν νῶ ἔχεις ποιεῖν; ἄλλο τι ἢ τούτῳ τῷ ἔργῳ, εἴ ἐπιχειρεῖς, διανοεῖ τούς τε νόμους ἡμᾶς ἀπολέσαι καὶ ξύμπασαν τὴν πόλιν τὸ σὸν μέρος; ἢ δοκεῖ σοι οἶόν τε ἔτι ἐκείνην τὴν πόλιν εἶναι καὶ μὴ ἀνατετράφθαι, ἐν ἣ αἱ γεγόμεναι δίκαι μὴδὲν ἰσχύουσιν, ἀλλ' ὑπὸ ἰδιωτῶν ἄκυροί τε

γίνονται καὶ διαφθείρονται ; τί ἐροῦμεν, ὦ Κρίτων, πρὸς ταῦτα καὶ ἄλλα τοιαῦτα ; πολλὰ γὰρ ἂν τις ἔχοι, ἄλλως τε καὶ ῥήτωρ, εἰπεῖν ὑπὲρ τούτου τοῦ νόμου ἀπολλυμένου, ὃς τὰς δίκας τὰς δικασθείσας προστάττει κυρίας εἶναι. ἢ ἐροῦμεν πρὸς αὐτοὺς ὅτι ἡδίκηει γὰρ ἡμᾶς ἢ πόλις καὶ οὐκ ὀρθῶς τὴν δίκην ἔκρινε ;

PLATO, *Crito*.

7. Explain the case construction of οὓς, οἷς . . . οὖσιν, ἡμῖν, μέρος ; the tense of πείσαντες and of ἀποκρίνασθαι ; the use of μὴ (before πείσαντες) and of μηδὲν ; the use of ὅτι (in the last clause).

8. Ἐκ τούτων δὴ ἄθρει. State concisely what is referred to. Show how this might be called the turning point of the discussion.

D.

Translate :

Λέξω δὲ καὶ ἃ Ἑρμογένους τοῦ Ἰππονίκου ἤκουσα περὶ αὐτοῦ· ἔφη γὰρ, ἥδη Μελήτου γεγραμμένου αὐτὸν τὴν γραφὴν, αὐτὸς ἀκούων αὐτοῦ πάντα μᾶλλον ἢ περὶ τῆς δίκης διαλεγόμενου, λέγειν αὐτῷ ὡς χρὴ σκοπεῖν ὅ τι ἀπολογήσεται, τὸν δὲ τὸ μὲν πρῶτον εἰπεῖν, Οὐ γὰρ δοκῶ σοι τοῦτο μελετῶν διαβεβιωκέναι ; ἐπεὶ δὲ αὐτὸν ἤρετο, ὅπως ; εἰπεῖν αὐτὸν, ὅτι οὐδὲν ἄλλο ποιῶν διαγεγέννηται ἢ πράττων τὰ δίκαια καὶ τῶν ἀδίκων ἀπεχόμενος, ἥνπερ νομίζοι καλλίστην μελέτην ἀπολογίας εἶναι. Καὶ μὴν, φάναι αὐτὸν, ἥδη μοῦ ἐπιχειροῦντος φροντίσαι τῆς πρὸς τοὺς δικαστὰς ἀπολογίας, ἡναντιώθη τὸ δαιμόνιον. καὶ αὐτὸς εἰπεῖν, Θαυμαστὰ λέγεις· τὸν δὲ, Θαυμάζεις, φάναι, εἰ τῷ θεῷ δοκεῖ βέλτιον εἶναι ἐμὲ τελευτᾶν τὸν βίον ἥδη ; οὐκ οἶσθ' ὅτι μέχρι μὲν τοῦδε τοῦ χρόνου ἐγὼ οὐδενὶ ἀνθρώπων ὑφείμην ἂν οὔτε βέλτιον οὔθ' ἥδιον ἐμοῦ βεβιωκέναι ; ἄριστα μὲν γὰρ οἶμαι ζῆν τοὺς ἄριστα ἐπιμελομένους τοῦ ὡς βελτίστους γίγνεσθαι, ἥδιστα δὲ τοὺς μάλιστα αἰσθανομένους ὅτι βελτίους γίνονται.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY
HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP
EXAMINATION.

GREEK GRAMMAR AND COMPOSITION.

Examiners : { WILLIAM DALE, M.A.
J. FLETCHER, M.A.
J. C. ROBERTSON, B.A.

A.

1. Show how ἔχω, ἔξω, εἶχον and ἔσχον are derived from the same root.

2. Write out fully the fut. ind. mid. of φαίνω and the aor. subj. pass. of τίθημι.

3. Parse fully the underlined words in the following :

(a) ἐν τοῖς βαρύτατ' ἂν ἐνέγκαιμι.

(b) ἐξὸν σωθῆναι.

(c) ὅ, τι ἂν τύχωσι, τοῦτο πράξουσιν.

(d) ἐκ ταυτησὶ δὴ τῆς ἐξετάσεως, πολλαὶ μὲν ἀπέχθεται μοι γεγόνασιν καὶ οἶαι χαλεπώταται, ὥστε πολλὰς διαβολὰς ἀπ' αὐτῶν γεγονέναι, ὄνομα δὲ τοῦτο λέγεσθαι, σοφὸς εἶναι.

4. Translate into Greek :

(a) They happened to be present.

(b) We ought to persuade those who do wrong.

(c) We ought to obey the magistrates.

Use verbal in -τέος in (b) and (c).

(d) They will become more beautiful than ever.

(e) You are too young to know the reason for his death.

(OVER.)

B.

Translate into Greek ;

I had lately ceased going to school, and my father was consulting with his friends what else (καὶ) he would have me taught. Now most of them thought that learning (παιδεία) required much labor, a long time and a great fortune (δαπάνη), but that our circumstances were narrow and in need of some speedy assistance (ἐπικουρία). But if I learned a common (βάνανσος) trade, in the first place, I myself should have a sufficiency (τὰ ἀρκοῦντα) from my trade, and should in no long time delight my father by always bringing home the produce (τὸ γιγνόμενον) of my labor. Then they discussed which was the best of trades, and easiest to be learned; and each praising a different trade, my father, turning to my uncle, who was a statuary (ἐρμογλύφος) said, it is not right that any other trade should be preferred while you are present.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

ZOOLOGY.

Examiners: { R. R. BENSLEY, B.A.
C. A. CHANT, B.A.
A. P. KNIGHT, M.A.

1. Name the submitted animal. To what order, class and sub-kingdom does it belong?
2. Make drawings to illustrate fully the external anatomy of this animal. Name the various organs and parts.
3. Define the nature and uses of respiration. How is it effected in the various animal sub-kingdoms? Illustrate your answer by a detailed description of illustrative types.
4. Compare the vertebral column of the fish with that of a mammal.
5. Define accurately what is meant by metamorphosis. State in detail an instance from the vertebrata and one from the invertebrata.
6. Draw the submitted section, naming the various parts.

Education Department, Ontario.

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THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

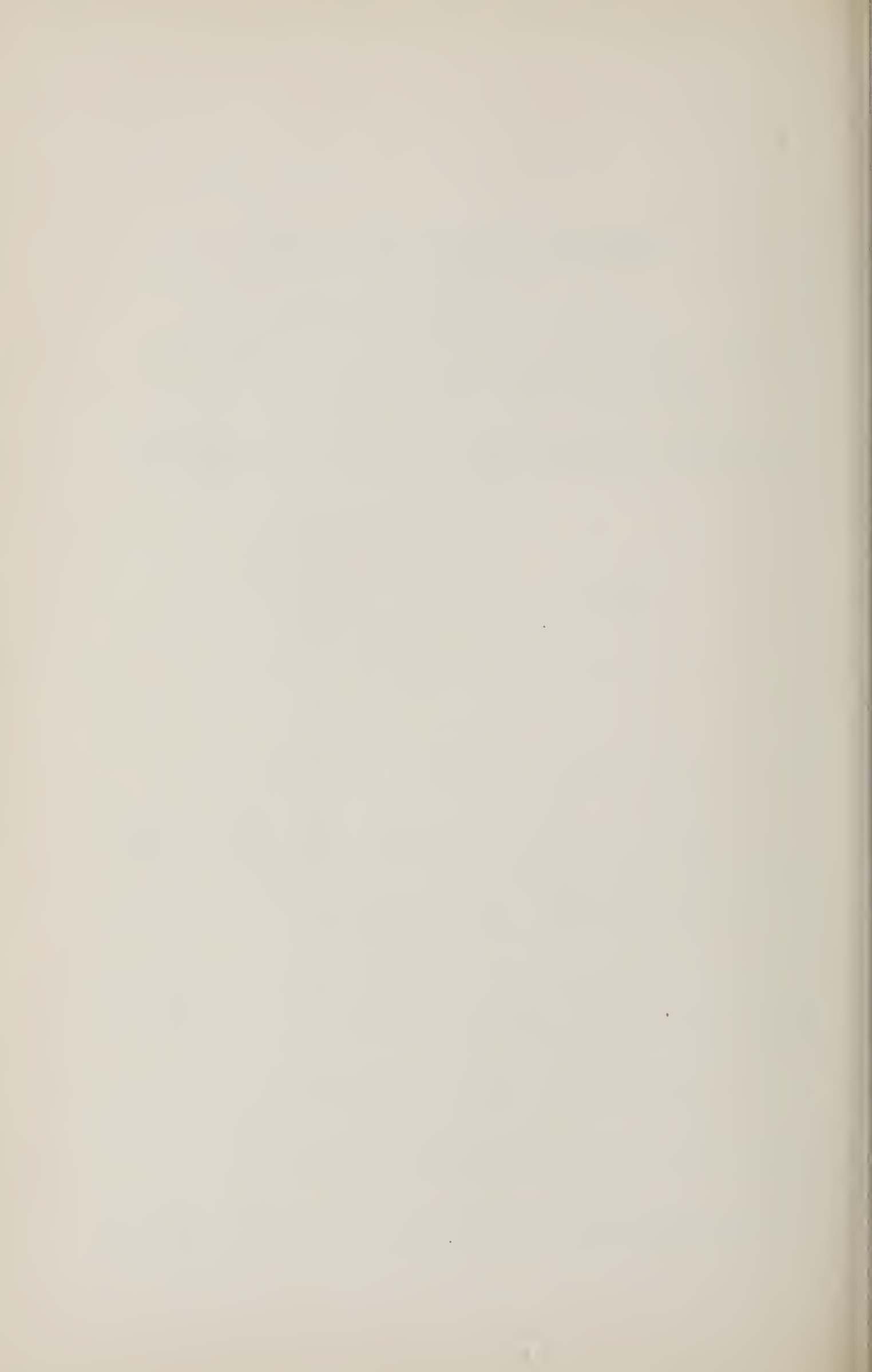
UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

BOTANY.

Examiners : { R. R. BENSLEY, B.A.
C. A. CHANT, B.A.
A. P. KNIGHT, M.A.

B.

1. Describe accurately the submitted plant.
2. (a) Give an account of the characteristics of the Boraginaceæ, comparing them with the Labiataæ.
(b) Mention three genera belonging to the first family, and point out their distinguishing features.
3. Give an account of the various kinds of inflorescence. Name a Canadian plant to illustrate each kind, and state to what family each plant belongs.
4. By what means are seeds distributed?
5. Give an account of the structure and life history of the ferns.
6. Draw the submitted section and name the parts.



Identify, with the help of your Text-book, the plant submitted and fill out the accompanying schedule:

SCHEDULE.

NOTE.—Candidates are requested to indicate Class, Sub-Class, and Division thus **X**. Name of Family, Genus and Species must be written in full.

CLASS I.—GYMNOSPERMS.		
CLASS. II.—ANGIOSPERMS.		
SUB-CLASS I.—DICOTYLEDONS.		
1. POLYPETALOUS DIVISION,		
2. GAMOPETALOUS DIVISION,		
3. APETALOUS DIVISION,		
SUB-CLASS II.—MONOCOTYLEDONS.		
1. SPADICEOUS DIVISION,		
2. PETALOIDEUS DIVISION,		
3. GLUMACEOUS DIVISION,		
Family		
Genus		
Species.		

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THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

CHEMISTRY.

Examiners : $\left\{ \begin{array}{l} \text{R. R. BENSLEY, B.A.} \\ \text{C. A. CHANT, B.A.} \\ \text{A. P. KNIGHT, M.A.} \end{array} \right.$

1. Compare the hydrides of the members of the nitrogen group.
2. (a) Two-tenths gram of a compound having the composition $\text{C}_{12} \text{H}_{22} \text{O}_{11}$ is burnt in air. Explain the chemical changes that take place, using equations. Calculate the volume of the products of combustion at 100°C and 740mm.
(b) .18 gram of a compound containing carbon, hydrogen and oxygen, is found to contain on analysis .072 gram of carbon, .012 gram of hydrogen, .096 gram of oxygen. Calculate the simplest formula of the substance.
3. Define the terms "oxidising agent" and "reducing agent", and illustrate your definitions by reference to the experiments:—
 - (a) Sulphuretted hydrogen gas is passed into a solution of ferric chloride.
 - (b) Carbon is heated to a high temperature with ferric oxide.
 - (c) Sulphur dioxide is passed into a solution of permanganate of potash.

Give equations.

4. (a) Dalton's gravimetric analysis of two compounds yielded the following results:—

Nitrogen 63.64,
Oxygen 36.36,

Nitrogen 46.67,
Oxygen 53.33.

Show the relation of these data to Dalton's formulae for these substances (NO and NO_2).

[OVER.]

(b) Gay Lussac's volumetric analysis of the mixture resulting from the decomposition of these same compounds gave the following results:—

Nitrogen $66\frac{2}{3}$ vols.

Nitrogen 50 vols.

Oxygen $33\frac{1}{3}$ vols.

Oxygen 50 vols.

Show the relation of these data to the present formulae for these substances, and to Avogadro's law.

5. (a) Describe what takes place when :

- (i) Iron is immersed in a solution of sulphate of copper,
- (ii) Copper, in a solution of bichloride of mercury,
- (iii) Zinc, in a solution of acetate of lead,
- (iv) Magnesium, in a solution of nitrate of silver.

(b) Explain how quantitative results in these experiments can be used as an aid in determining atomic weights.

6. Describe simple laboratory methods of preparing small quantities of (a) metallic arsenic from the trioxide, (b) trichloride of antimony, (c) ferrous sulphate.

7. Sketch the chemistry of lead.

8. What is meant by the "Periodic Law"? Illustrate its significance by reference to the members of group iv. (Carbon=12, silicon=28, tin=118, lead=207.)

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ANNUAL EXAMINATIONS, 1895.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

PHYSICS.

Examiners: $\left\{ \begin{array}{l} \text{R. R. BENSLEY, B.A.} \\ \text{C. A. CHANT, B.A.} \\ \text{A. P. KNIGHT, M.A.} \end{array} \right.$

NOTE—*Experiments must be described in detail, must be capable of giving moderately accurate results, and be such as can be performed with simple apparatus.*

1. (a) Define “ g ”; and give a method of determining it.

(b) Two masses, each 1 kilo, are attached to the ends of a light flexible string and hung over a pulley which moves very easily. Upon one mass a gram weight is put. Neglecting the mass of the string and pulley, find the space the weights will pass through in 10 seconds. [$g=980$.]

2. (a) A steam-engine supplies power to a dynamo which is used to produce electric lights, and also to work a motor, which again runs a circular saw in a mill. Trace the transformation of energy as far as you can, beginning with the fuel fed to the engine.

(b) A body of mass 50 grams falls from a height 30 centimetres above the ground. Find the kinetic and the potential energy at any point on its way down, and hence show that the sum of these two quantities at all points in its path is the same as the energy at the highest point, or that on reaching the ground. [Give units.]

3. A stone is thrown at an angle of 60° with the horizontal with a velocity of 30 metres per second. Find the height it will rise and the range on the horizontal.

4. You wish to find the specific gravity of some oil, and have only a U-tube and a graduated ruler. Explain how you would do it.

[OVER.]

5. (a) State Boyle's Law, and describe how to verify it.

(b) Oxygen gas is sold for lecture purposes at 15 cents per cubic foot at, say, 15°C . and atmospheric pressure. A steel circular cylinder containing the oxygen is 5 feet high and 14 inches in diameter, and the gas is under a pressure of 10 atmospheres, temperature 15°C . After being used at a lecture, the pressure was found to be 6 atmospheres, but the temperature was 21°C . How much should be charged? [$\pi = \frac{22}{7}$.]

6. (a) Give full explanation of a method of finding the latent heat of fusion of ice. Deduce the formula required, allowance being made for calorimeter, and state where errors will likely appear.

(b) If the latent heat, using the centigrade scale, is 80, what is it on the Fahrenheit scale?

7. A thermometer (such as is used by physicians) is graduated only from 95° to 110° F., and you wish to find the temperature of some water, but it is somewhat lower than the lowest graduation, which is just above the bulb. How could you determine its temperature? Illustrate your method numerically.

8. What is meant by the *polarization* of a common voltaic cell (copper and zinc in dilute acid)? Show how you would demonstrate experimentally that there is a back electromotive force?

9. Describe either a copper, a silver, or a hydrogen voltmeter. Give composition of liquid, size of vessel, of electrodes and what current you would expect to measure. Describe how you would prepare the voltmeter for use, and if the hydrogen apparatus is taken, how you would determine the temperature and then allow for it in working out the result.

10. Six similar cells are arranged in series, and the circuit completed through a coil of wire and a galvanometer. The resistance of the battery, coil and galvanometer are 10, 50, and 20 ohms respectively. If the difference of potential between the terminals of the galvanometer be 2 volts, what is the E. M. F. of each cell of the battery?

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THE HIGH SCHOOL SENIOR LEAVING AND
UNIVERSITY HONOR MATRICULATION.

UNIVERSITY MATRICULATION SCHOLARSHIP EXAMINATION.

PROBLEMS.

Examiners : $\left\{ \begin{array}{l} \text{A. R. BAIN, LL.D.} \\ \text{N. F. DUPUIS, M.A.} \\ \text{A. C. MCKAY, B.A.} \end{array} \right.$

1. Obtain a geometrical construction for inscribing in a given equilateral triangle, an equilateral triangle which shall have one-half the area of the first.

2. If the sides of a concyclic quadrilateral are chords of any four circles, the four other points of intersection of the circles lie on a circle.

3. In the triangle ABC the external bisector of the angle A meets BC produced in D . Then the rectangle $BA \cdot AC$ is less than the rectangle $BD \cdot CD$ by the square on AD .

4. One vertex of an equilateral triangle is fixed, and another moves on a fixed circle. Find the locus of the third vertex.

5. Find the number of ways in which ten persons may distribute themselves among four rooms, with at least one person in each room.

6. Solve :

$$x^2 - yz = a^2, \quad y^2 - zx = b^2, \quad z^2 - xy = c^2.$$

[OVER.]

7. Show that

$$1 - n \frac{x+1}{x+n} + \frac{n(n-1)}{1 \cdot 2} \frac{x^2+2x}{(x+n)^2} - \frac{n(n-1)(n-2)}{1 \cdot 2 \cdot 3} \frac{x^3+3x^2}{(x+n)^3} + \dots \\ = 0, \text{ } n \text{ being a positive integer.}$$

8. If $a+b+c=0$, show that

$$\frac{(a^2+b^2+c^2)(a^5+b^5+c^5)}{(a^3+b^3+c^3)(a^4+b^4+c^4)} = \frac{5}{3}.$$

9. Eliminate θ from the equations

$$x = a \cos \theta + b \cos 2 \theta.$$

$$y = a \sin \theta + b \sin 2 \theta.$$

10. Give a geometrical proof of

$$\cos \alpha + \cos \beta = 2 \cos \frac{\alpha + \beta}{2} \cos \frac{\alpha - \beta}{2}.$$

11. Determine the point P in the plane of the triangle ABC , whose sides and angles are known, from which one side shall subtend the given angle α , and another side the angle β .

12. Prove that the radius of the circle which circumscribes the triangle formed by joining the centres of the escribed circles of the triangle ABC , is equal to the diameter of the circle which circumscribes the triangle ABC .

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

KINDERGARTEN.

THEORY AND PRACTICE OF THE GIFTS.—FIRST PAPER.

ASSISTANTS.

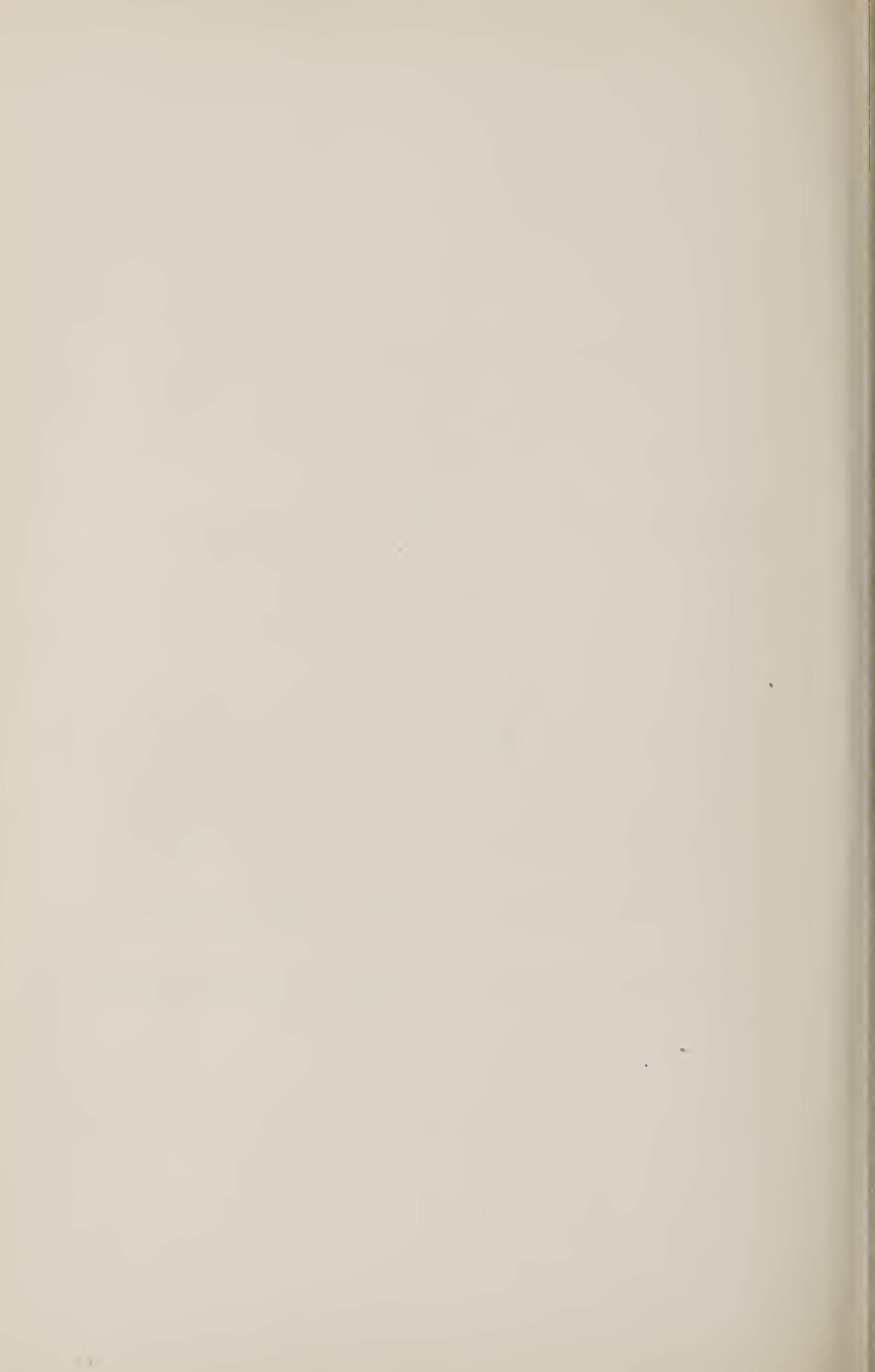
Examiner :—E. BOLTON.

1. "All development begins with what is most simple, and rises thence to more and more complicated forms of existence."

Discuss this statement and show the value of the First Gift as *the basis* for the development of all the faculties and powers of the child?

2. Show how the Second Gift fulfils these requirements.

3. Write out an exercise in the First and Second Gifts, showing how the child is enabled to express his ideas through the play.



Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

KINDERGARTEN.

THEORY AND PRACTICE OF THE GIFTS.—SECOND PAPER.

ASSISTANTS

Examiner:—A. M. HUGHES.

1. (a) Give the salient characteristic of each Gift.
(b) Explain the psychological necessity for emphasizing this characteristic in all exercises connected with each Gift.
(c) Give an illustration of a lesson to develop the salient characteristic of the Fourth Gift.
2. “Each Gift contains what was foreshadowed in the previous one and shadows the truth to be realized in the following one.”
(a) Show how this is true in each Building and Laying Gift.
(b) Why does each Gift present contrast in a different quality?
3. (a) How does sequence differ in the Third and Fifth Gift exercises.
(b) Describe briefly a lesson in each to illustrate the difference.
4. Give exercises with sticks for a higher class, and define the aim of the lesson and its relation to other Gifts.

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ANNUAL EXAMINATIONS, 1895.

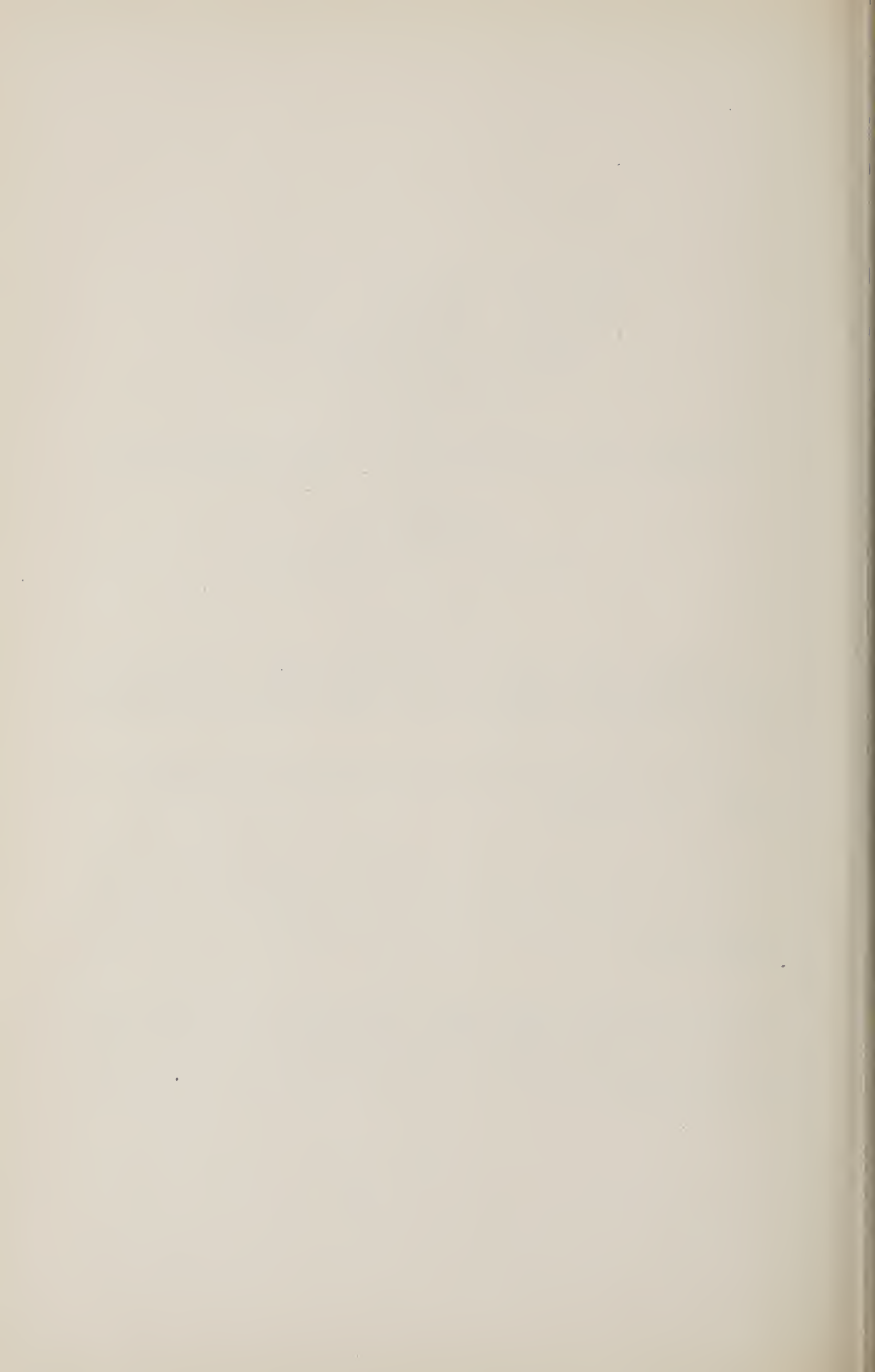
KINDERGARTEN.

THEORY AND PRACTICE OF THE OCCUPATIONS

ASSISTANTS.

Examiner :—A. E. MACKENZIE.

1. Explain fully how the Occupations give permanence to ideas received from Gifts, and tell what Gifts and Occupations are most closely connected.
2. Which Occupation do you consider most developing for the child? Give reasons.
3. Give an exercise in any Occupation developing any form.
4. Show development of Occupations, giving special characteristics of each.
5. (a) Draw five Life-forms from each of the following:—Square, Pentagon, Oblong, Hexagon, Octagon.
(b) Develop a school of sewing, illustrating the different kinds of angles.



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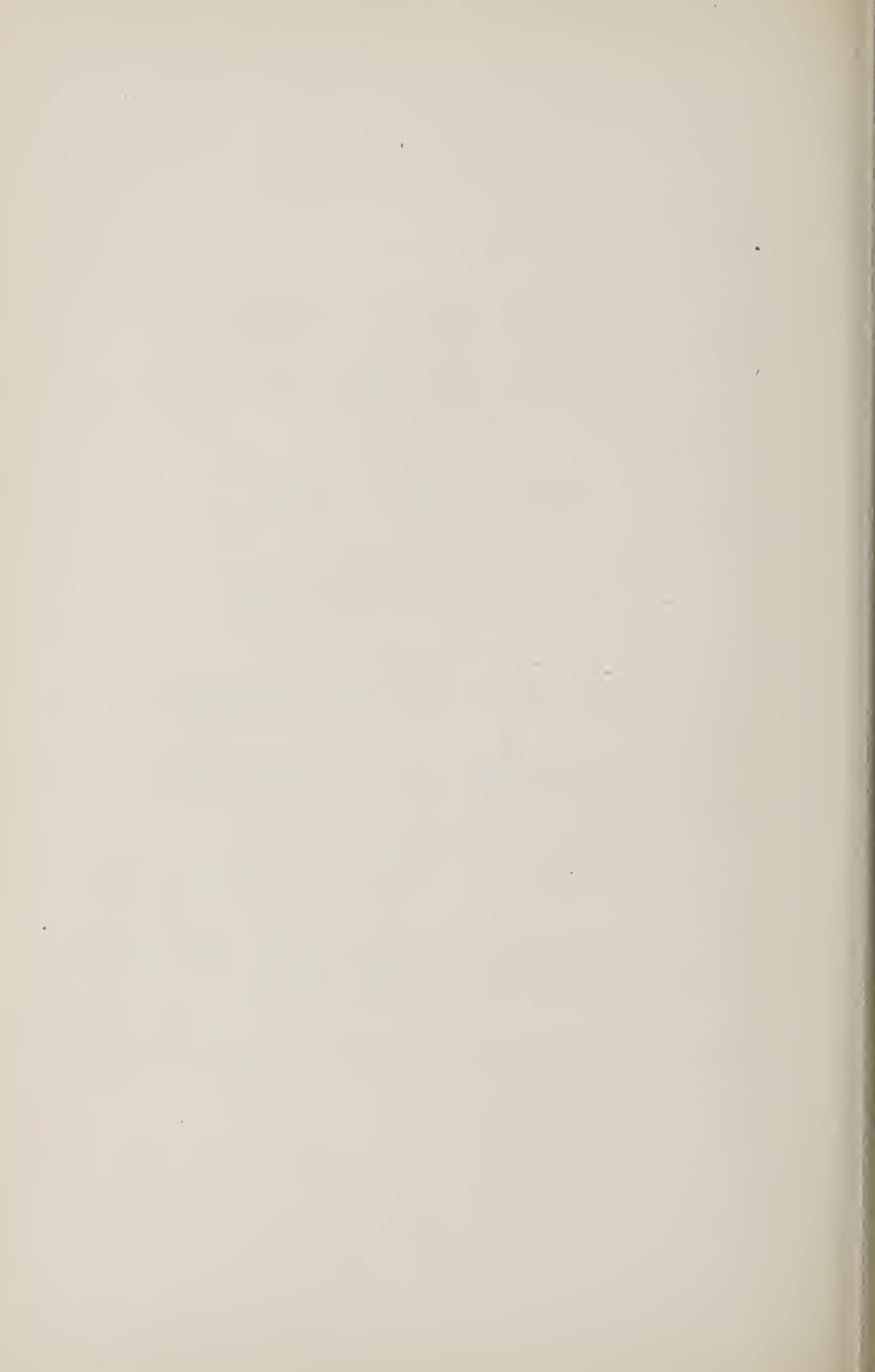
KINDERGARTEN.

MISCELLANEOUS PAPER.

ASSISTANTS.

Examiner:—M. E. MACINTYRE.

1. (a) Explain what is meant by “Education by self-activity”?
- (b) Give an illustration of this principle in the Gifts, in the Occupations, and in the Games.
- (c) How is this principle often violated?
2. Explain Froebel’s use of symbolism in the Kindergarten.
3. Name and describe three of the most important games used in your Kindergarten, explaining fully their use.
4. Write an essay on the value of color and music in education.



Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

KINDERGARTEN.

GENERAL PRINCIPLES.

DIRECTORS.

Examiner:—M. E. MACINTYRE.

1. Contrast the educational ideal of the present with that of the earliest systems of education. Trace the growth of the present ideal.

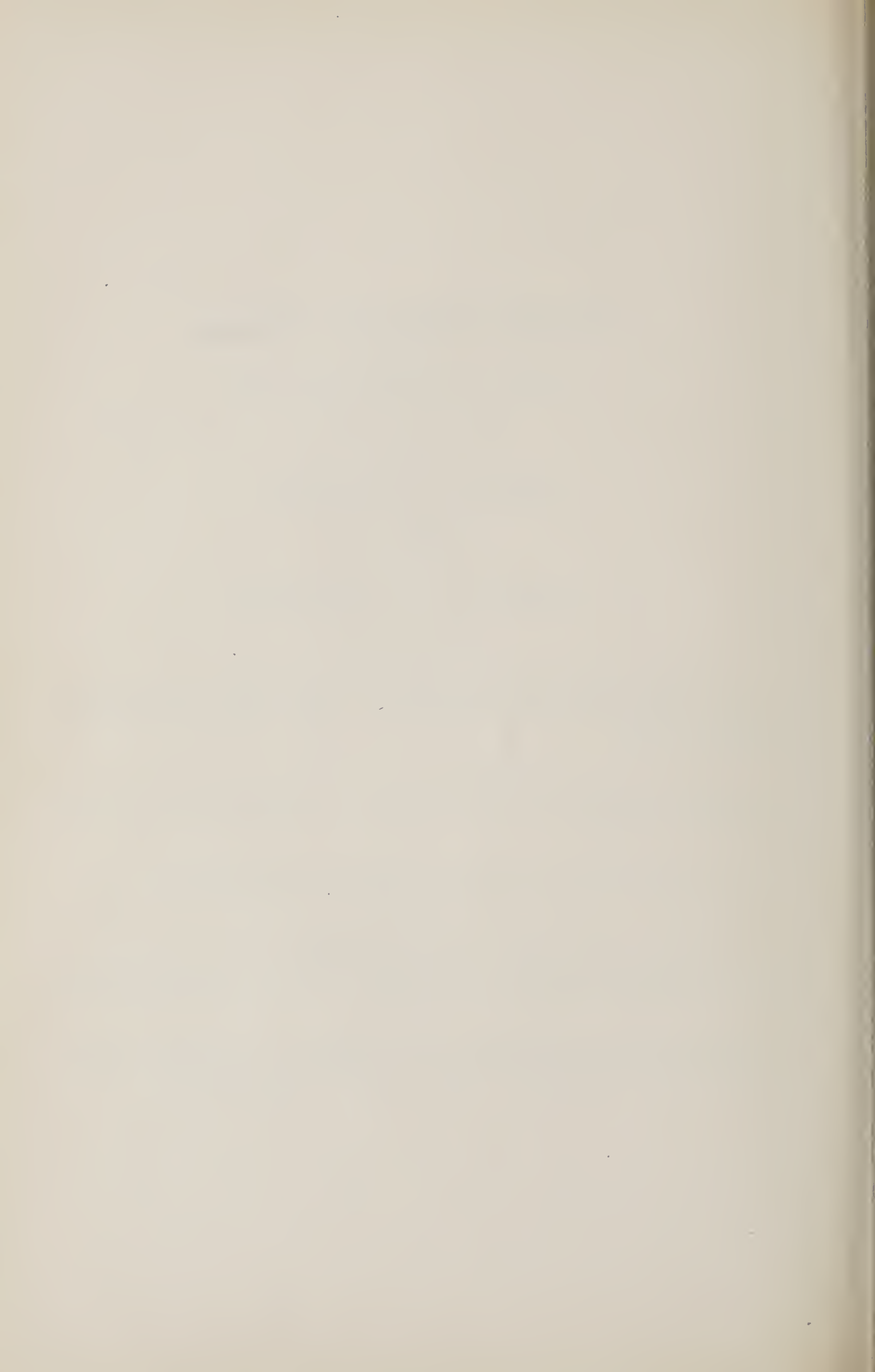
2. Prove the psychological insight of Froebel from his Mutter und Kose-Lieder.

3. Explain fully the place of imitation in education.

4. What is the value of artistic training?

Give an illustration of the expression of universal principles from sculpture, painting, or literature.

5. Show the Law of Order to be universal in Nature. What is its value in education? How would you develop it?



Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

KINDERGARTEN.

THEORY AND PRACTICE OF THE GIFTS AND
OCCUPATIONS.

DIRECTORS.

Examiner :—A. E. MACKENZIE.

1. Show how the requirements of the child are met by the Gifts and Occupations.
2. (a) Trace the law of "Inner Connection" through the Gifts.
(b) Explain the relationship between the Gifts and Occupations and show how they are connected with the other exercises in the Kindergarten.
3. What principles should underlie the formation of a program? Illustrate by briefly outlining a program of Gift and Occupation exercises for two classes (children 4 and 6) for first week of summer. Draw forms.
4. Show how you would develop a sequence in Sewing—of not less than ten forms—illustrating obtuse angle.
5. Should exercises in Gifts and Occupations be dictated? Give reasons. In what other ways may they be given?

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

KINDERGARTEN.

MUTTER UND KOSE-LIEDER.

DIRECTORS.

Examiner:—A. M. HUGHES.

1. Give briefly the general purpose of the Mutter-und-Kose Lieder for both mother and child. What is its distinctive value in educational literature?

2. In what instinct is the group of "Light Songs" based? Trace the steps by which the instinct grows into the conscious thought of the child.

3. "The common root of all sin is the violation of the social tie."

(a) What are the specific forms of violation?

(b) How does Froebel seek to lessen the tendency to such violation?

4. What suggestions does Froebel give the mother for the revelation of the Creator through nature?

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ANNUAL EXAMINATIONS, 1895.

KINDERGARTEN.

MISCELLANEOUS PAPER.

DIRECTORS.

Examiner :—E. BOLTON.

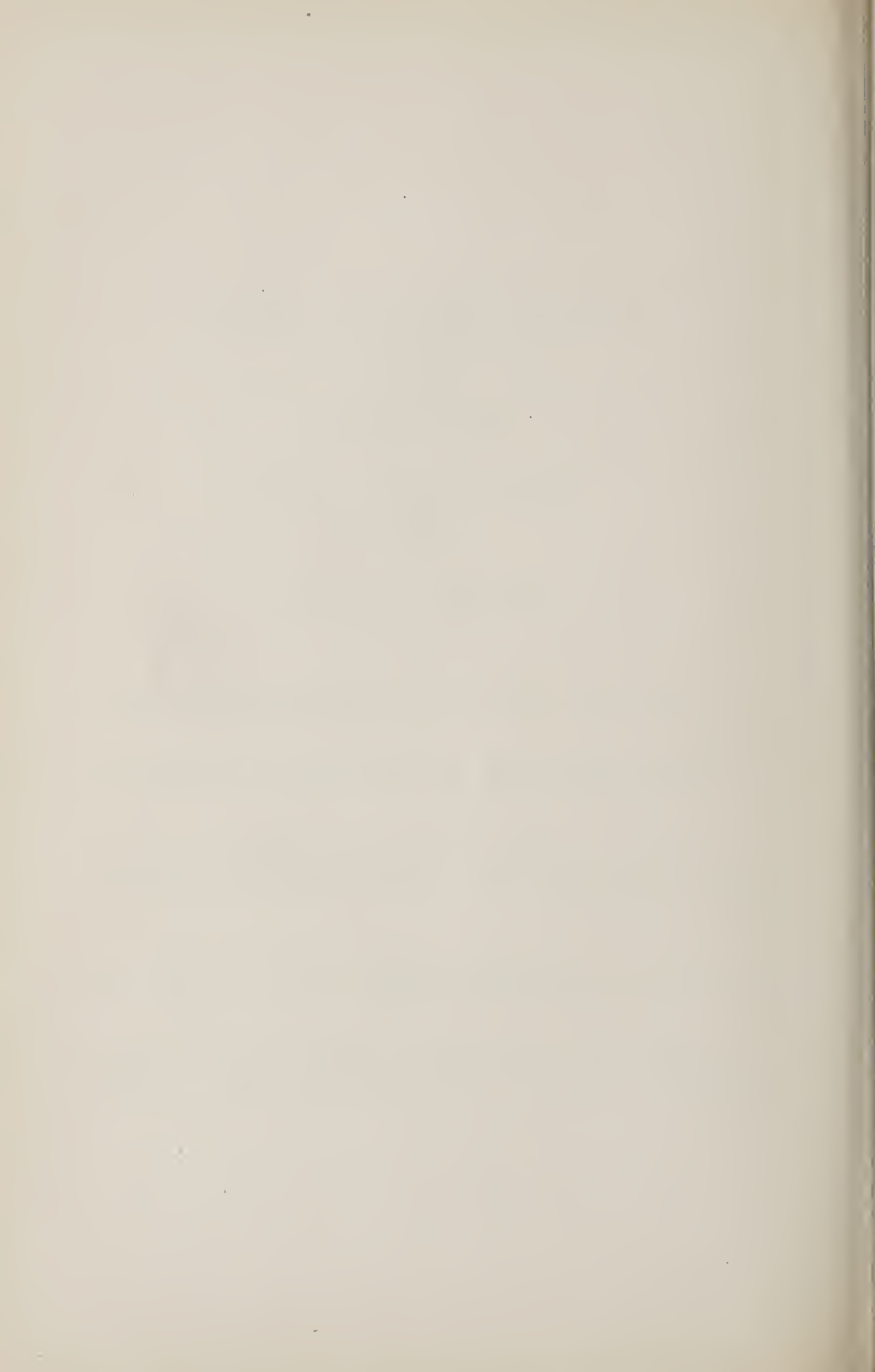
1. “The way to science lies through common knowledge.”—*Huxley*.

Discuss with reference to science work in the Kindergarten, showing relation to other work.

2. *Drawing* and *Color* are for young children a language, a means of expressing ideas. Show fully their importance as factors in education.

3. Discuss the educational value of Symbols, with special reference to the Kindergarten Games.

4. Explain the development of intellectual and emotional idealization. Illustrate from your experience with Kindergarten children.



Education Department, Ontario.

JANUARY, 1895.

NORMAL SCHOOL ENTRANCE EXAMINATION.

HISTORY OF EDUCATION.

1. (a) What is the Renaissance?
(b) According to the Renaissance ideal, when was a man well educated?
(c) What evils of the schools of this time still survive?
2. Discuss the Jesuit Schools under the following:—
 - (a) Their teachers,
 - (b) Their punishments,
 - (c) Their popularity.
3. Ascham is said to be a complete retainer, and Ratke a rapid impressionist.
Explain this sentence.
4. (a) Give a brief outline of how Rousseau would educate a child.
(b) What are the chief defects of such a method?
5. Give an outline of the life of Pestalozzi.



Education Department, Ontario.

JANUARY, 1895.

NORMAL SCHOOL ENTRANCE EXAMINATION.

SCIENCE OF EDUCATION.

1. State the difference between Organized and Unorganized bodies.
2. Give arguments to show that Mind is not Material.
3. Define Faculty. Which of the following are faculties:—Memory, judgment, consciousness, attention, conception? Give reasons for your answer.
4. What are “Necessary Ideas”? Give names and show how they are to be tested.
5. Does Sensation give a knowledge of the external world? Give reasons for your answer.
6. Define and illustrate Perception, Percept, Conception, Concept.
7. State the qualifications of a perfect teacher.
8. State briefly how obedience is to be secured.

Education Department, Ontario.

AUGUST, 1895.

NORMAL SCHOOL ENTRANCE EXAMINATION.

HISTORY OF EDUCATION.

1. The Renaissance “attributes to literature more direct power over common life than literature has ever had, or is ever likely to have.”

Give a summary of Quick’s discussion of this point.

2. Quick says that of late years the agreement of our Public Schools with Montaigne has been broken up.

What was this agreement; and what are the two causes for this breaking up?

3. “The gentlemen of Port Royal worked free from school-room traditions.”

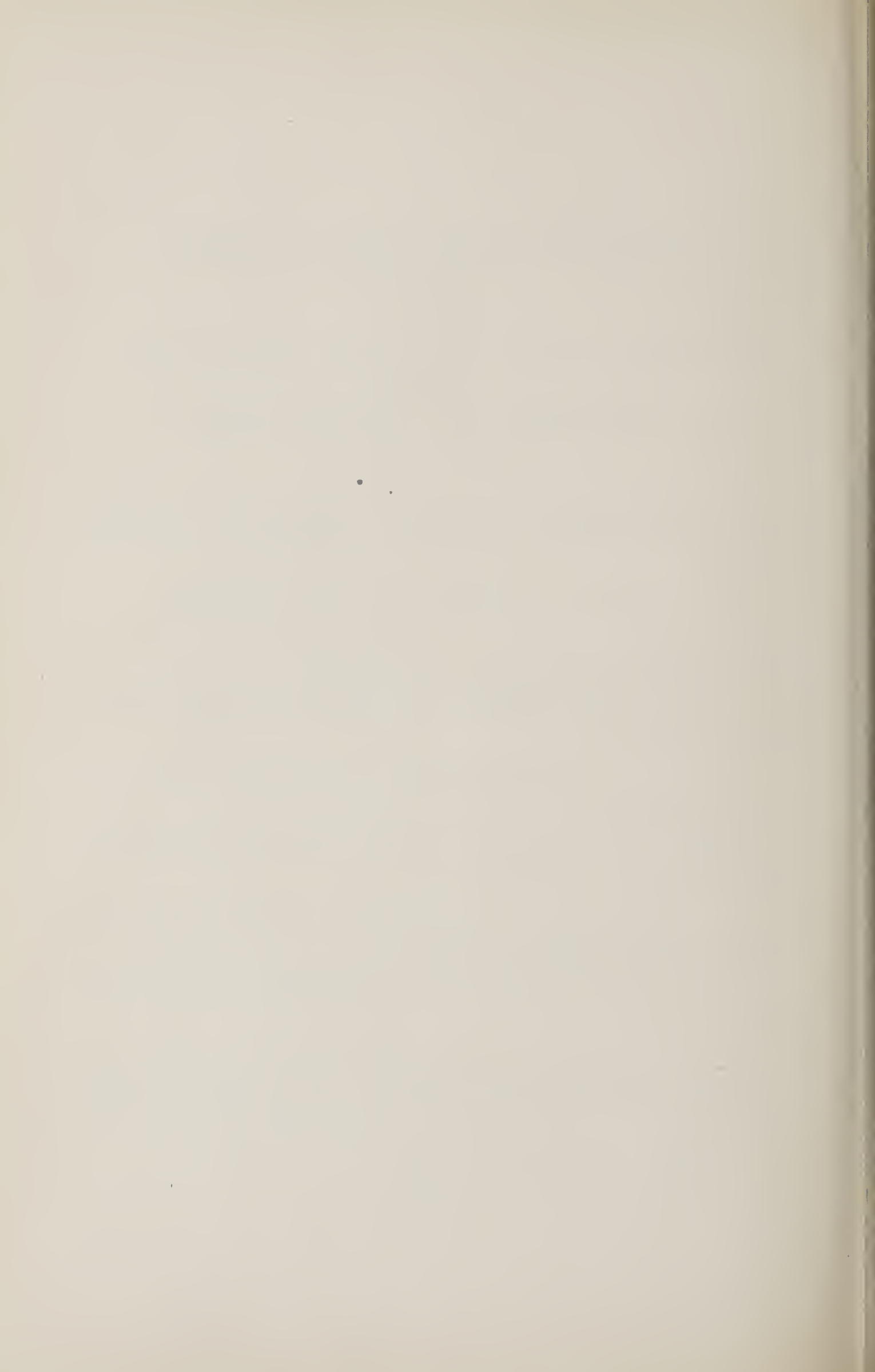
Name some of these school-room traditions; and show the advantage gained by this freedom.

4. “Are we driven to the alternative of agreeing either with Locke or with the School-master?”

State the two theories thus set down as Locke’s and the School-master’s.

5. Pestalozzi says:—“The public common school coach throughout Europe must not simply be better horsed, but still more must it be turned round and be brought on an entirely new road.”

Explain, briefly, this new road.



Education Department, Ontario.

AUGUST, 1895.

NORMAL SCHOOL ENTRANCE EXAMINATION.

SCIENCE OF EDUCATION.

1. (a) What is "a Sensation"?
(b) Explain, as fully as you can, the way in which you get a *Percept* of the desk at which you are writing.
2. Distinguish between the following, giving definite illustrations :—
 - (a) Mind and Matter;
 - (b) Memory and Imagination;
 - (c) Induction and Deduction.
3. How do we get the idea of "Space"?
4. "Education is both a Science and an Art."
Explain and defend this statement.
5. Write brief notes on the following :—
 - (a) Tests of a good question ;
 - (b) Corporal punishment.



Education Department, Ontario.

DECEMBER EXAMINATIONS, 1895.

COUNTY MODEL SCHOOLS.

PHYSIOLOGY AND TEMPERANCE.

NOTE.—Students who have used the “Public School Physiology and Temperance” will take section A; those who have used the “Manual of Hygiene” will take section B.

A.

1. State fully what you would do to restore life in a case of apparent death from drowning.
2. Name the fluids that aid digestion, and explain the use of each.
3. Distinguish between infectious and contagious diseases.
4. Define *alimentary canal*, *pharynx*, *expiration*, *inspiration*, *respiration*, *antiseptic*, *disinfectant*.
5. Classify foods, and explain why a mixed diet is necessary to continued health.
6. Show that alcohol is both an irritant and a narcotic.
7. What effect have alcoholic drinks (a) on the skin, (b) on the respiration?

B.

8. State fully what you would do to restore life in a case of apparent death from drowning.
9. (a) Give the chief components of air, their relative proportions, and the principal properties of the most important.
(b) Mention several ways in which impurities are added to the air.
10. (a) Distinguish between infectious and contagious diseases. Give examples.
(b) Define *epidemic*, *endemic*, *sporadic*.
11. (a) Account for the reddening of the surface of the body which usually follows the use of alcoholic drinks.
(b) Show that alcohol does not maintain animal heat.
12. Name the fluids that aid digestion, and explain the use of each.
13. Define *alimentary canal*, *expiration*, *inspiration*, *respiration*, *antidote*, *emetic*, *disinfectant*.



Education Department, Ontario.

DECEMBER EXAMINATIONS, 1895.

COUNTY MODEL SCHOOLS.

METHODS OF INSTRUCTION.

1. Explain how you would teach reading to the lowest class in Form I. State the merits of your method. What work would you expect this grade to accomplish in reading during a school year?

2. Under the headings Matter and Method draw up a lesson-plan for teaching the definition of Case, or the agreement between the verb and its subject-nominative.

3. (a) State definitely what you expect your pupils to gain from the study of geography.

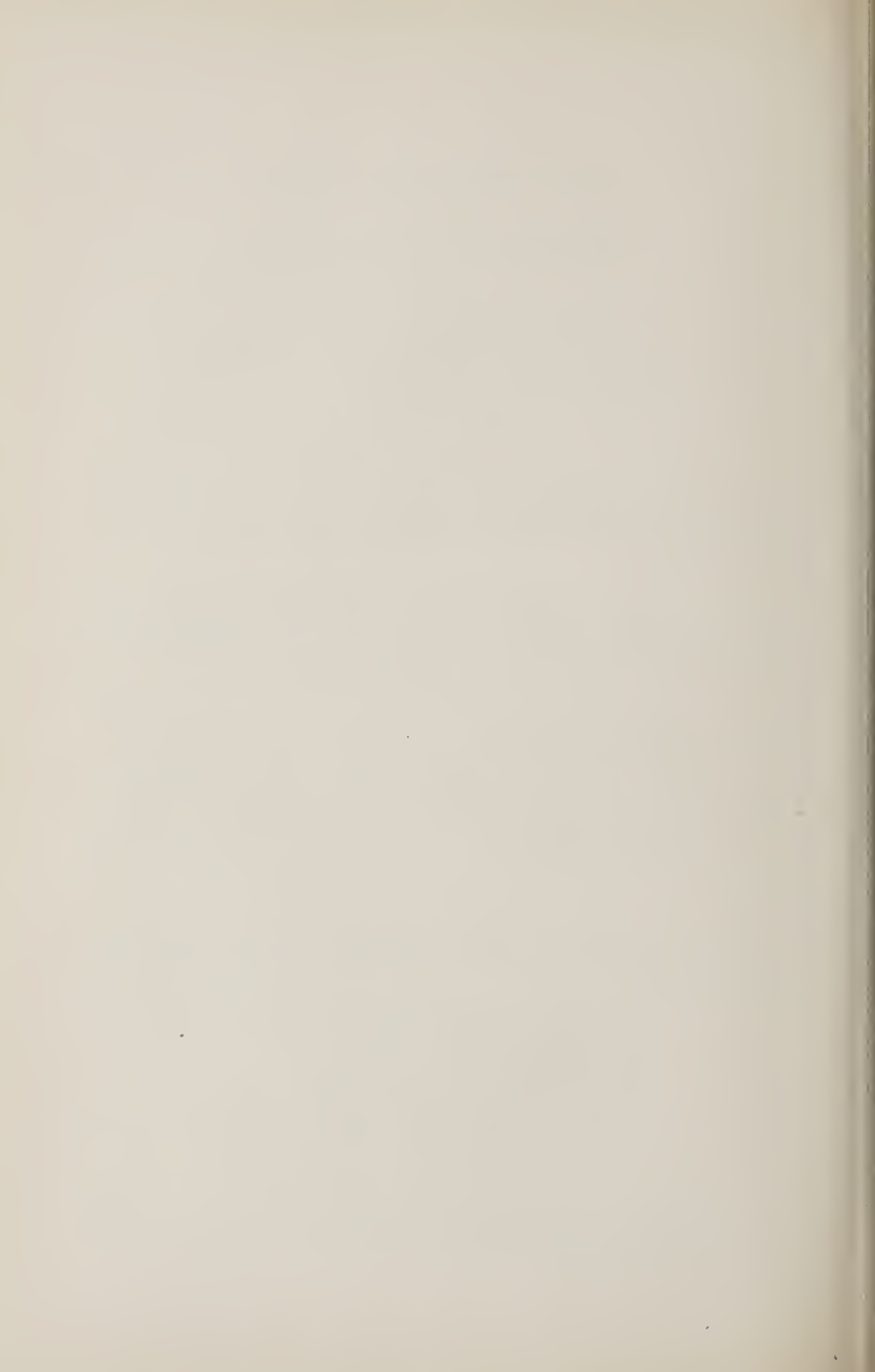
(b) Give the uses you would make of the following in teaching this subject:—the wall map, the blackboard, the globe, models in clay or putty.

(c) Mention any other aids you would use in teaching this subject.

4. Why should literature be taught? Say how you would apply your reasons in teaching the literature of the following to Form II. :—

Beautiful faces are they that wear
The light of a pleasant spirit there;
Beautiful hands are they that do
Deeds that are noble, good and true;
Beautiful feet are they that go
Swiftly to lighten another's woe.

5. Illustrate by examples, as fully as you can, the relation between different operations in arithmetic, or what may be called the unity of arithmetic.



Education Department, Ontario.

DECEMBER EXAMINATIONS, 1895.

COUNTY MODEL SCHOOLS.

THEORY OF EDUCATION.

1. In order to get others in possession of what we ourselves know, what is required by us besides the possession of the requisite knowledge of the subjects?

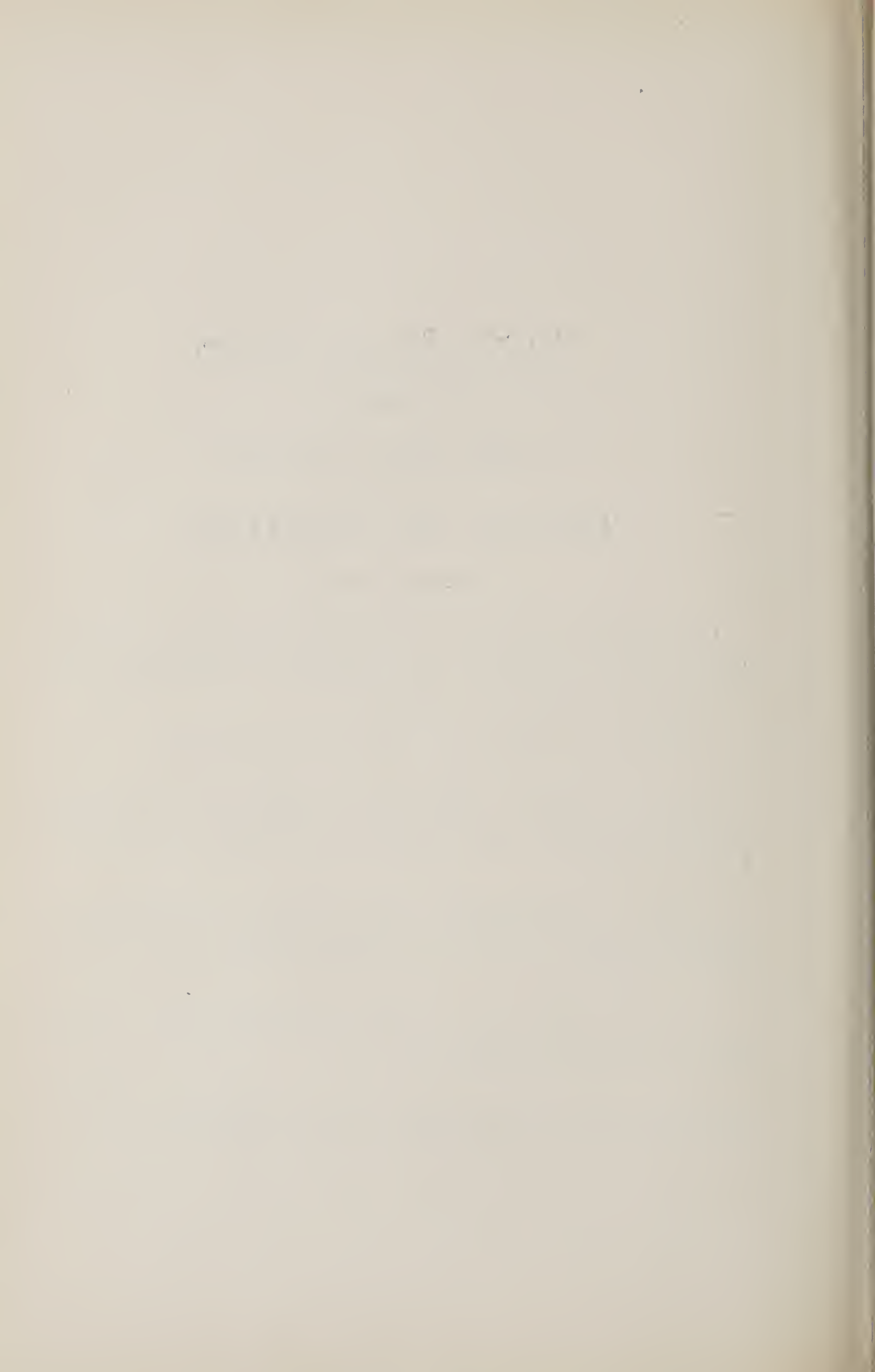
2. Distinguish Information, Instruction, Education.

3. What is Habit? What habits would you especially endeavor to have your pupils form, and how would you proceed to accomplish this?

4. What is Classification? Give your ideas of classifying an ungraded school. What are the difficulties in the way of a perfect classification?

5. In the construction of a school time-table what general principles should be observed?

6. State some of the principal objects of Questioning. What are the tests (a) of a good question, (b) of a good answer?



Education Department, Ontario

DECEMBER EXAMINATIONS, 1895.

COUNTY MODEL SCHOOLS.

SCHOOL LAW AND REGULATIONS.

1. (a) What are the duties of the principal and of the assistants, respectively, as to the organization and discipline of the school, and the promotion of pupils?

(b) State the regulations as to religious instruction.

2. In regard to engagements between teachers and trustees,

(a) What is necessary to make them binding?

(b) What proportion of salary is given for teaching a part of the year?

(c) What action is required in case of dispute?

3. Give the duties of teachers as to

(a) Holding public examinations;

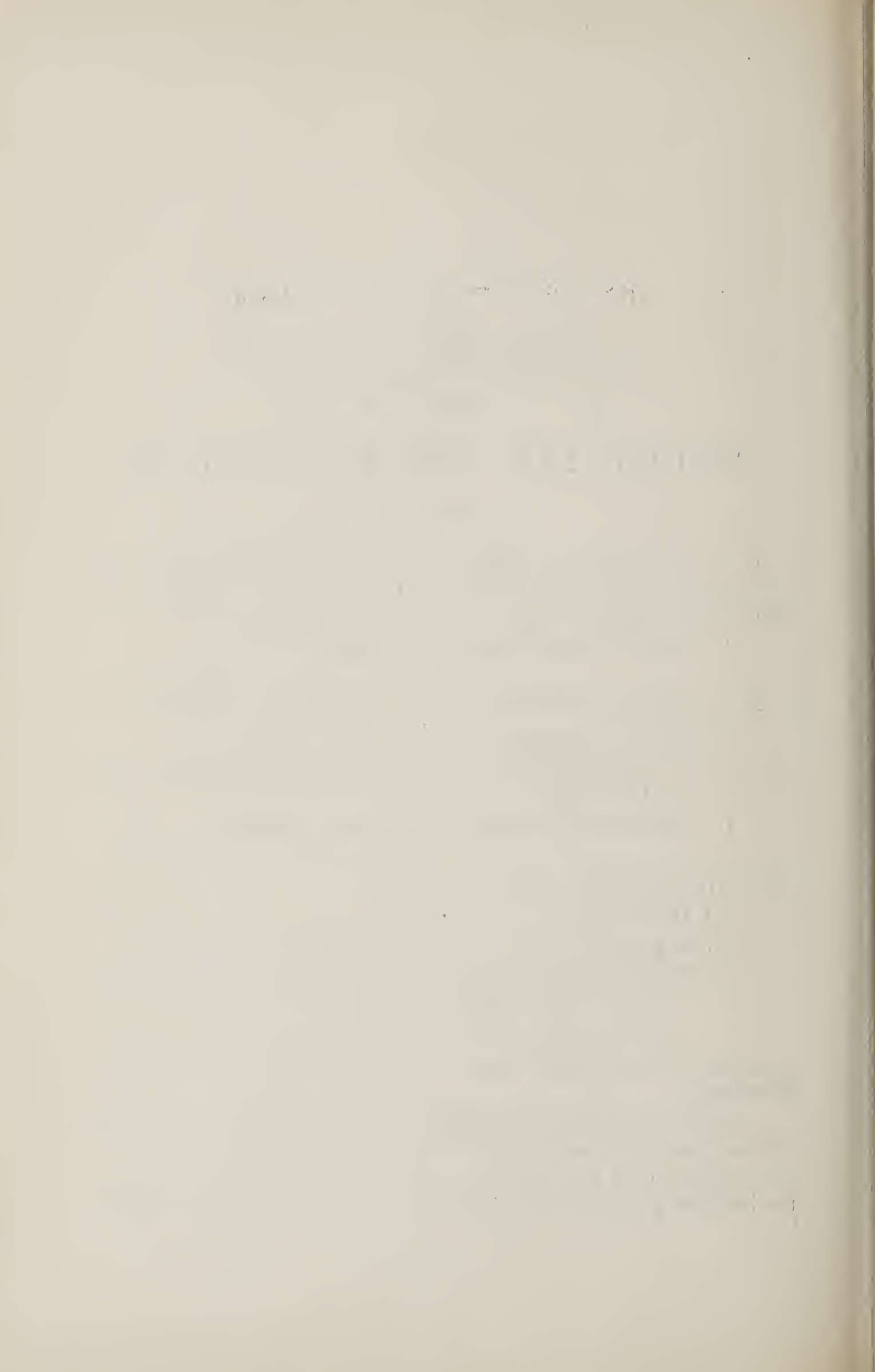
(b) Exempting from attendance under the Truancy Act;

(c) The use of English in schools where a different language is the mother tongue of the pupils.

4. (a) When and how may a pupil be expelled, and how re-admitted?

(b) For what reasons, other than misconduct, may a child be sent away from school?

(c) In what places is the pupil responsible to the teacher for his (the pupil's) conduct?



Education Department, Ontario.

JUNE, 1895.

SECOND CLASS PROFESSIONAL EXAMINATION.

NORMAL SCHOOLS.

SCHOOL ORGANIZATION AND MANAGEMENT.

Examiner:—JOHN BREBNER.

1. (a) Explain fully the terms "Government", "Discipline" and "Punishment", as applied to School Management.

(b) State, with reasons, what you consider the elements of governing power in a teacher.

(c) Show the moral effect of good discipline in the school.

(d) What are the aims of punishment? State broad principles by which the teacher should be guided in administering punishment.

2. "In separating a school into classes two conditions have to be fulfilled."

(a) State in your own language the conditions.

(b) Explain them as fully as possible.

3. By what general principles would you be guided in constructing a Time-Table for an ungraded school?

4. How would you deal with:

(a) Tardy and irregular attendance,

(b) Truancy,

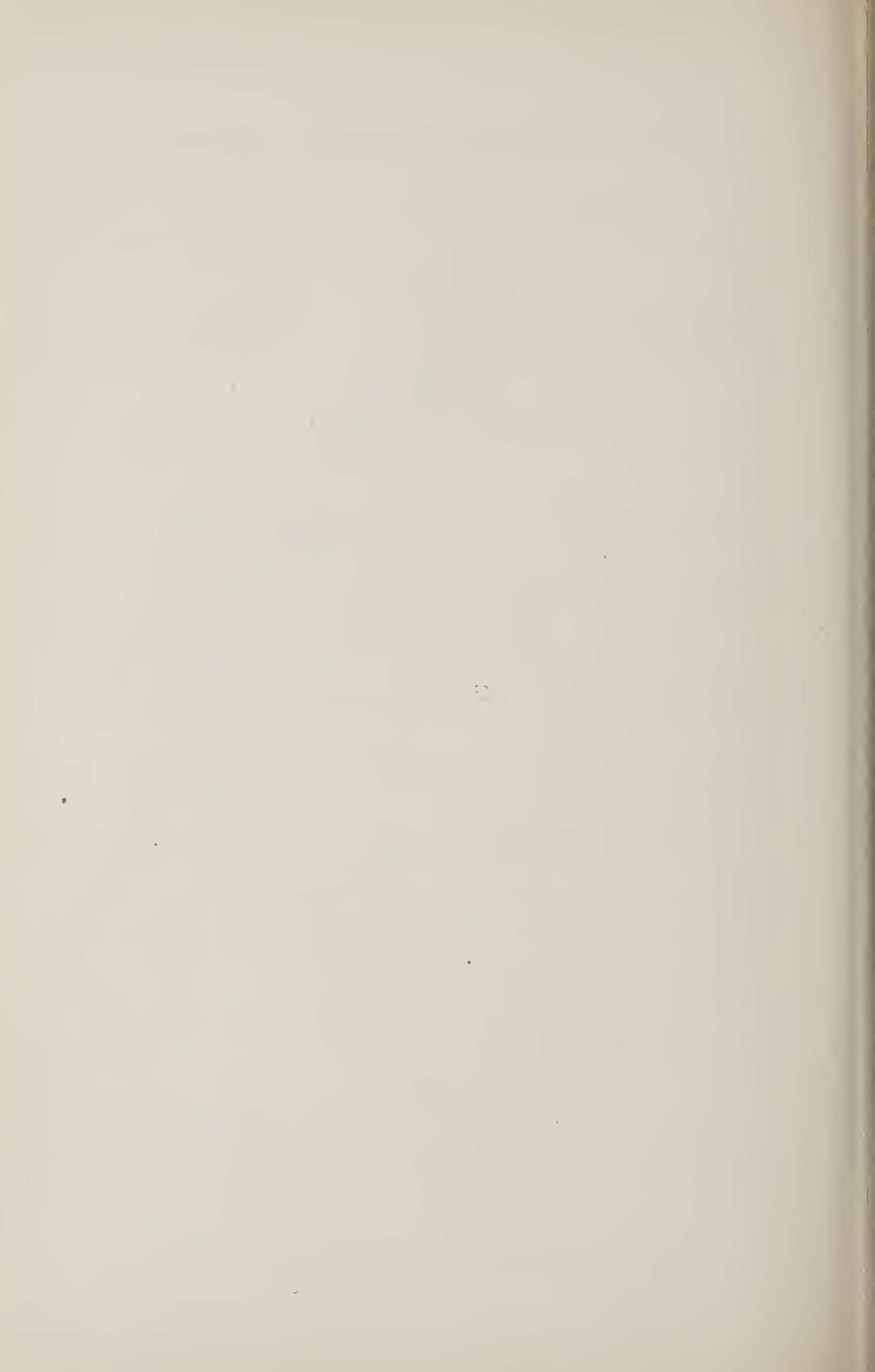
(c) Clever but indolent pupils?

5. State some of the evil effects resulting from defective Heating, Ventilation and Lighting of the school room.

6. Discuss the following questions as fully as time will permit:

(a) The awarding of prizes as an incentive to effort.

(b) The value of written examinations as a means of training.



Education Department, Ontario.

JUNE, 1895.

SECOND CLASS PROFESSIONAL EXAMINATION.

NORMAL SCHOOLS.

HISTORY OF EDUCATION.

Examiner :—W. ATKIN.

1. (a) Compare the educational ideals of the Jesuits with those of the Port Royalists.

(b) Account for the difference between these ideals.

2. (a) State and explain the Educational Principles of Ratke that are recognised by modern teachers.

(b) Account for their permanence.

3. (a) Tell what Comenius did for Education that has proved to be on a solid foundation and “not liable to any ruin.”

(b) Show what influence Bacon’s philosophy had in developing the educational theories and methods of Comenius.

4. Rousseau, Pestalozzi and Froebel appear in historic order as the advocates of the doctrine of Nature as applied to education.

(a) Explain the doctrine referred to.

(b) State briefly in what particulars each of these reformers developed this doctrine.

5. Herbert Spencer shows that the Precepts of Pedagogy cannot be definitely deduced until the laws of mental evolution have been established.

State and explain these laws so far as Mr. Spencer has determined them.

Education Department, Ontario.

JUNE, 1895.

SECOND CLASS PROFESSIONAL EXAMINATION.

NORMAL SCHOOLS.

METHODS IN ENGLISH.

Examiner : — W. TYTLER, B.A.

1. (a) State, giving reasons, which method of teaching primary Reading you consider best.

(b) Give notes of an introductory lesson in Reading to a class of beginners, according to the method you prefer.

2. Indicate briefly how you would deal with pupils who have the reputation of being “incorrigibly bad spellers”.

3. Outline a lesson on the *Origin of Rivers* suitable for a Third Class. State especially what means you would use to make the subject interesting; and what use you would make of the general knowledge which it may be assumed that the pupils possess.

4. “You may be well content to set before yourself, as the main object in teaching History, the kindling of a strong interest in the subject, rather than the covering of a large area of mere information.”

Briefly discuss this statement, and show how this “main object” may be accomplished.

5. Give a brief outline of your method of teaching Composition to a Junior Fourth Class.

6. Give a detailed plan of a lesson in English Grammar on *any one* of the following topics; and state to what Form you would teach the lesson you select:—

(a) The parts of speech,

(b) Kinds of subordinate clauses,

(c) The indirect object,

(d) Clauses introduced by the relative pronoun *what*.

[OVER.]

7. Outline a half-hour lesson in Literature to a Fourth Form on the following poem :—

THE EVENING CLOUD.

A cloud lay cradled near the setting sun ;
A gleam of crimson tinged its braided snow ;
Long had I watched the glory moving on,
O'er the still radiance of the lake below.
Tranquil its spirit seemed, and floated slow,—
Even in its very motion there was rest ;
While every breath of eve that chanced to blow
Wafted the traveller to the beauteous West :—
Emblem, methought, of the departed soul,
To whose white robe the gleam of bliss is given ;
And, by the breath of Mercy made to roll
Right onward to the golden gates of Heaven ;
Where, to the eye of faith, it peaceful lies,
And tells to man his glorious destinies.

Education Department, Ontario.

JUNE, 1895.

SECOND CLASS PROFESSIONAL EXAMINATION.

NORMAL SCHOOLS.

SCIENCE OF EDUCATION.

Examiner:—JAMES L. HUGHES.

1. It is claimed by some that all methods limit the child's development.

(a) Do you hold this opinion? Why?

(b) State a definite principle by which to test whether methods are helpful or injurious to the child, and give two illustrations of teaching that violate your principle, and two in harmony with it.

2. "Touch is the foundation sense."

(a) Give reasons to prove the truth of this assertion considering its relation

(i) To the growth of the other senses,

(ii) To the development of the brain power of the young child.

(b) Describe two changes you have decided to make in your methods of teaching since you understood this principle, either by adopting new methods or by giving up some formerly used.

3. (a) Show the educational value of "interest" on the part of the child.

(b) State two general principles of teaching based on the law of interest.

4. Explain "Apperception" and show its relationship to mental growth.

5. Discuss "Habit" in its relation to character-forming.

6. "The so-called Faculties of Mind are successive stages in the development of intelligence."

(a) Explain what is meant by this statement.

(b) Show that this psychological truth is the basis of the idea of the correlation of studies.

7. (a) Why do you believe child study to be very important?

(b) Outline your plans for pursuing child study.

Education Department, Ontario.

JUNE, 1895.

SECOND CLASS PROFESSIONAL EXAMINATION.

NORMAL SCHOOLS.

METHODS IN MATHEMATICS AND SCIENCE.

Examiner:—H. D. JOHNSON.

1. "It is by Arithmetic more than by any other subject in a school course that the art of thinking—consecutively, closely, logically—can be effectually taught."

Examine this statement and show the importance of Arithmetic in mental training.

2. Show fully how you would teach *any one* of the following lessons to emphasise the new steps:—

(a) How to multiply one decimal by another.

(b) How to find the L.C.M. of fractions.

(c) How to find the area of a triangle.

3. (a) Teach the number "eight" to a class of beginners.

(b) Explain how you would satisfy yourself that your pupils had gained a clear conception of the number taught.

4. (a) Frame a series of suitable questions for preparing your class for the study of Euclid I., 5.

(b) Explain how you would teach this proposition.

5. "The sum of two quantities into their difference is equal to the difference between the squares of the two quantities."

(a) Explain your method of teaching this principle.

(b) Show how you would get your pupils to apply it in finding the continued product of

$$(a+b+c)(b+c-a)(c+a-b)(a+b-c).$$

6. How would you teach the action of the common pump?

[OVER.]

7. "The observer must put his facts together, must group them according to their resemblances and differences, and see what they have to say for themselves."

(a) Show the importance of this principle and indicate how you would apply it when teaching an introductory lesson on Classification of Plants to a class preparing for the Primary examination.

(b) Outline your method for teaching the following botanical terms: *blade*, *petiole*, *stipules*.

(c) Name, with reasons, the plants you would select for your lesson.

Education Department, Ontario.

DECEMBER, 1895.

SECOND CLASS PROFESSIONAL EXAMINATION.

NORMAL SCHOOLS.

SCHOOL ORGANIZATION AND MANAGEMENT.

*Examiner:—*JOHN BREBNER.

1. State fully

- (a) The limits of efficient attention for children of various degrees of attainment and age in Public Schools;
- (b) The effects of iterations and reiterations on the part of the teacher.

2. (a) Show the value of reviews.

(b) State fully your method of review in any one subject of the IV. Form course.

3. "Never give a command unless you are sure you can enforce it, nor unless you mean to see that it is obeyed."

. Discuss the above quotation fully.

4. Enumerate and discuss four features of school management which will assist you in securing regularity of attendance and punctuality.

5. "To study lessons at night when the mind is tired, and review them in school when the mind is fresh, is reversing the order of nature."

Discuss the above, giving reasons for or against the truth of the statement.

6. In the classification of a school what value would you attach to (a) age, (b) attainments, and (c) mental abilities of the scholars?



Education Department, Ontario.

DECEMBER, 1895.

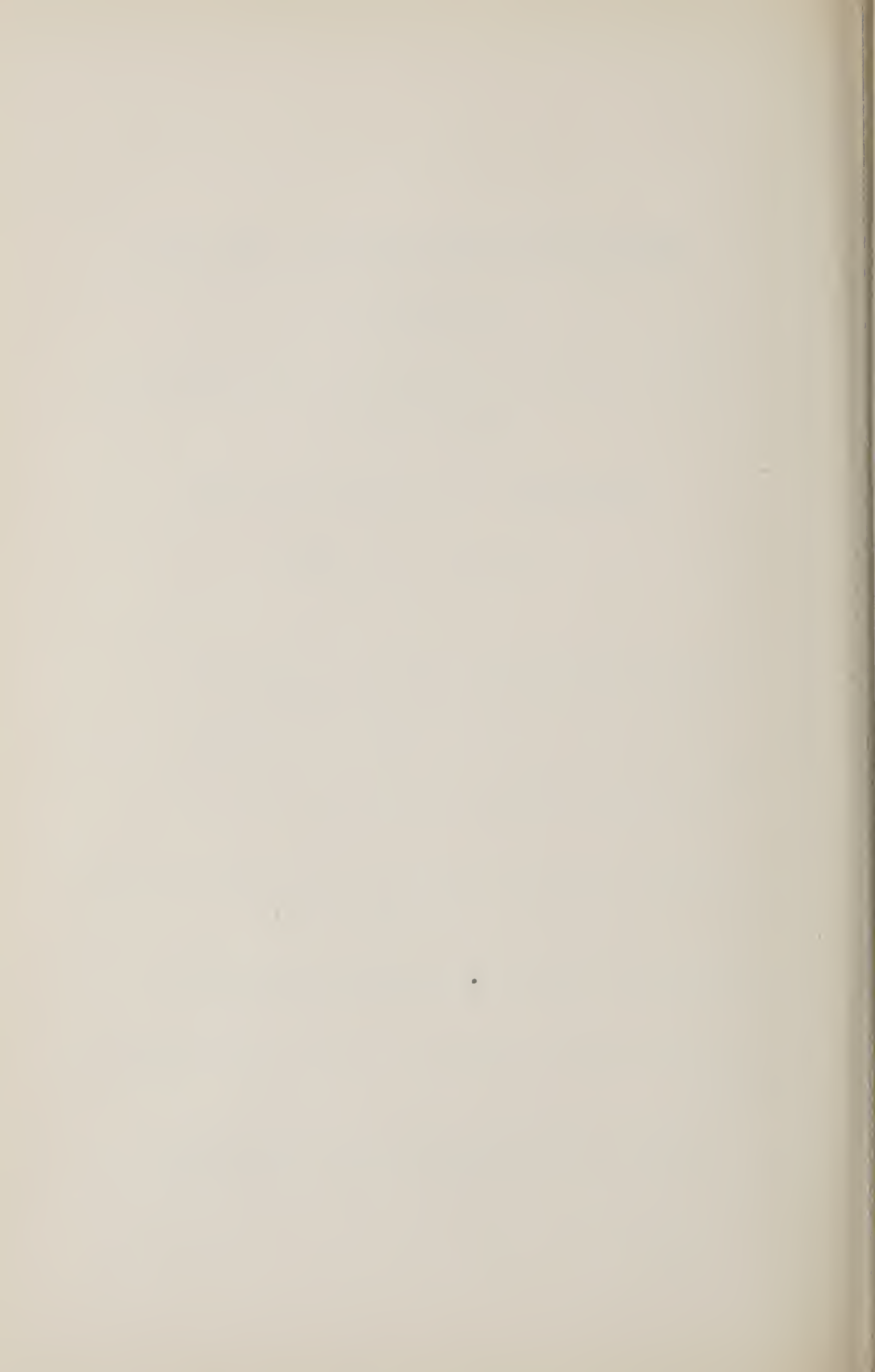
SECOND CLASS PROFESSIONAL EXAMINATION.

NORMAL SCHOOLS.

HISTORY OF EDUCATION.

Examiner :—W. ATKIN.

1. (a) Describe the Renaissance ideal of Education.
(b) Give a brief account of its development.
(c) Comment on Quick's criticism of its defects.
2. (a) State the Educational theory of the Realists.
(b) Discuss the defects of this theory.
3. Account for the fact that it is in secondary instruction only, that the Jesuits have had marked success.
4. State, with comments, the planks in the platform of "the new education," that were advocated by Mulcaster.
5. Briefly sketch the influence of Locke on Educational Reformers.
6. (a) Define Utilitarianism as applied to Education.
(b) State Spencer's attitude towards Utilitarianism.



Education Department, Ontario.

DECEMBER, 1895.

SECOND CLASS PROFESSIONAL EXAMINATION.

NORMAL SCHOOLS.

METHODS IN ENGLISH.

Examiner : — W. TYTLER, B.A.

1. On taking charge of a school, you find that the pupils generally read without proper expression, neglect pauses, and articulate indistinctly. What means would you adopt to remedy these faults?

2. Give full details of the proper method of conveying to young pupils a correct idea of a map.

3. Outline a scheme of Language Lessons to a Second Form.

4. Give detailed plan of a lesson on *The Transitive Verb*.

5. Outline a conversational lesson in History to a Third Form on *any one* of the following topics:—

(a) French Discoveries in Canada,

(b) The War of 1812,

(c) Confederation.

6. (a) State, with reasons, your opinion as to the relative value of Prose and Poetry as subjects for lessons in Literature.

(b) Give a brief sketch of a lesson in Literature to a Fourth Form on the following extract:—

I passed some time in the contemplation of this wonderful structure, and the great variety of objects which it presented. My heart was filled with a deep melancholy to see several dropping unexpectedly in the midst of mirth and jollity, and catching at everything that stood by them to save themselves. Some were looking up towards the heavens in a thoughtful posture,

[OVER.]

and, in the midst of a speculation, stumbled and fell out of sight. Multitudes were very busy in the pursuit of bubbles that glittered in their eyes and danced before them ; but often, when they thought themselves within the reach of them, their footing failed, and down they sank. In this confusion of objects, I observed some with scimitars in their hands, who ran to and fro upon the bridge, thrusting several persons on trap-doors, which did not seem to lie in their way, and which they might have escaped, had they not been thus forced upon them.

Education Department, Ontario.

DECEMBER, 1895.

SECOND CLASS PROFESSIONAL EXAMINATION.

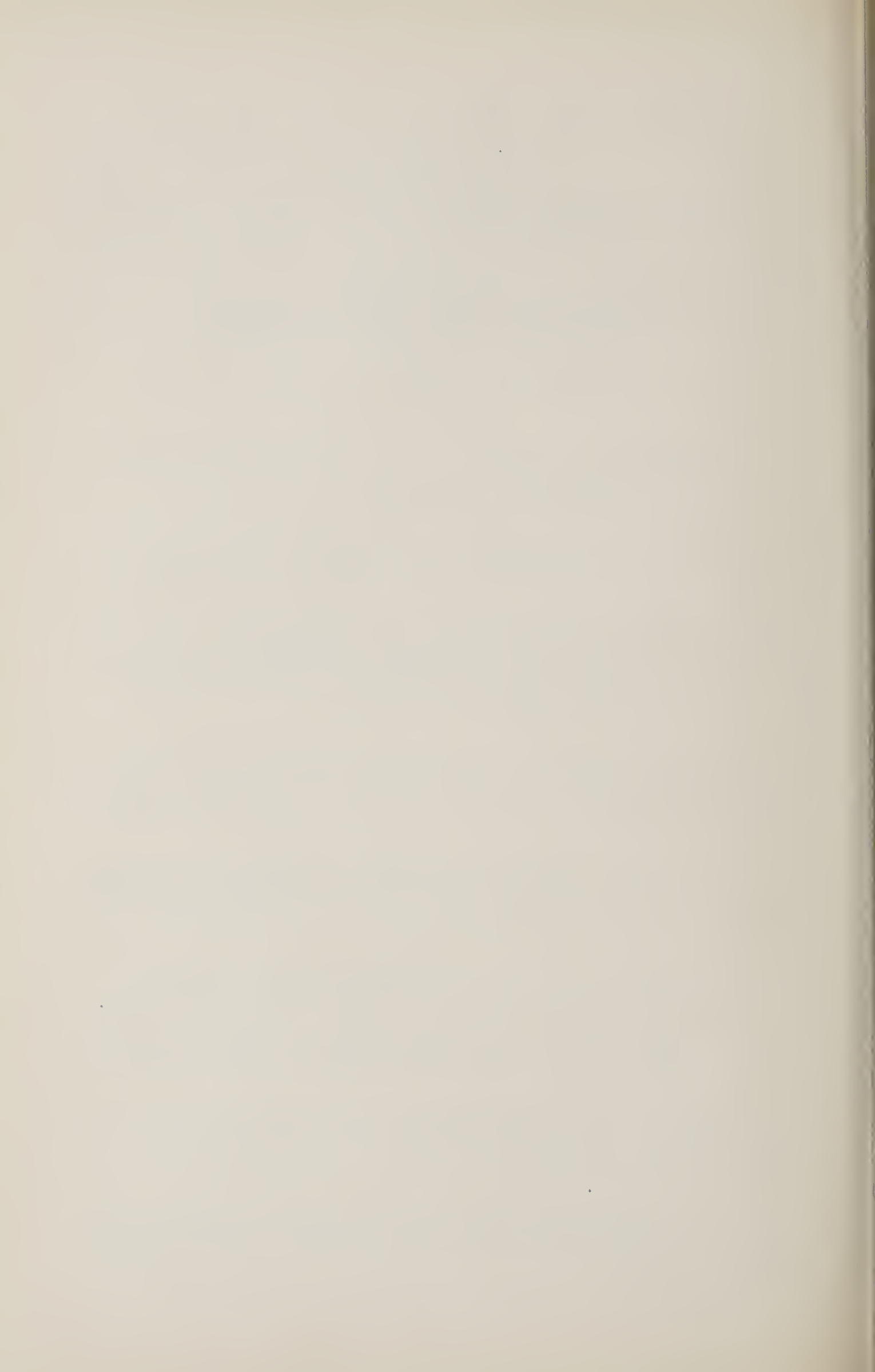
NORMAL SCHOOLS.

SCIENCE OF EDUCATION.

Examiner:—JAMES L. HUGHES.

1. Distinguish Perception, Apperception, and Retention, and show their relationship to one another.
2. Harmonize the maxims: "Learn to know by doing"; "Learn to do by knowing"; and "Learn to do by doing".
3. "There are three bases of Psychological Life."—*McLellan*. Name them, and show clearly their relationships:
 - (a) To the department of psychological life with which they are directly connected individually.
 - (b) To one another.
4. Explain Analysis and Synthesis, and show that they are essential elements in a psychological unity, and not conflicting mental operations.
5. Define Self-activity; distinguish it clearly from responsive activity; and give illustrations of the true Self-activity of the child in learning any two subjects.
6. "Seize every instinct at the height of its development."
 - (a) What is meant by this quotation?
 - (b) Describe three instincts you have recognized in children, and state the approximate ages at which they are at their height.
7. Distinguish the presentative and the representative in your perception of any object in the examination hall at a distance of ten feet or more from you.
8. "Not only is attention the prime condition and the measure of intellectual development, it is of perhaps equal importance in the moral sphere."

Explain the two statements made in this quotation.



Education Department, Ontario.

DECEMBER, 1895.

SECOND CLASS PROFESSIONAL EXAMINATION.

NORMAL SCHOOLS.

METHODS IN MATHEMATICS AND SCIENCE.

Examiner:—H. D. JOHNSON.

1. (a) State and illustrate what is involved in rational counting.

(b) Show that in the rational method the idea of fractions is present from first to last, and point out the bearing of this in the teaching of fractions.

2. (a) What are the different methods of teaching simple subtraction?

(b) Fully explain the method you prefer, giving reasons for your preference.

3. Show how you would make clear to a class that there are $30\frac{1}{4}$ sq. yds. in a square rod.

4. How would you teach that $\cdot 3\dot{5}4 = \frac{39}{110}$?

5. (a) Show how you would base your first lesson in Algebra on what the pupil already knows of Arithmetic.

(b) Teach how to solve

$$\frac{x-1}{2} - \frac{x-2}{3} = \frac{x-3}{4} + \frac{x-4}{5}.$$

6. Show how you would present the various steps in teaching Euclid I., 32. (If a side of a triangle be produced, the exterior angle is equal to the sum of the two interior opposite angles, and the sum of the three interior angles is equal to two right angles.)

[OVER.]

7. "It is no concern of ours to teach in schools that which an observant and intelligent child would learn out of doors; but it is our concern so to teach him as to make him observant and intelligent."

What method would you pursue in teaching science in a Public School to make your pupils "intelligent and observant"?

Illustrate your answer by outlining a lesson on *the fruit*, suitable for a Second Book class.

8. Give fully your method of teaching *one* of the following:

- (a) The difference between an element and a compound.
- (b) The formation of dew.
- (c) How to find the specific gravity of a solid heavier than water.

Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN MATHEMATICS.

(FOR PASS CANDIDATES.)

Examiners : $\left\{ \begin{array}{l} \text{J. D. DICKSON, B.A.} \\ \text{W. J. ROBERTSON, B.A., LL.B.} \end{array} \right.$

1. "It is by arithmetic more than by any other subject in a school course that the art of thinking—consecutively, closely, logically,—can be effectively taught."—*Fitch*.

Discuss this statement.

2. Show how you would prove to a class that

$$(a) \cdot 47 = \frac{47}{100}, \quad (b) \cdot \dot{4}7 = \frac{47}{99}, \quad (c) \cdot 4\dot{7} = \frac{43}{90}.$$

3. "Division may be regarded as a case of repeated subtractions."

Outline your method of proving to a class the truth of this statement.

4. Teach Euclid I., 4. Where would you expect pupils to make mistakes in reasoning? How would you correct them?

5. Show how you would prove to a class that

$$a^3 + b^3 + c^3 = 3abc \text{ when } a + b + c = 0.$$

6. Teach a lesson in simple equations, showing the difference between a conditional equation and an identical equation.

7. A man has \$9000 invested in a 4% stock at 90, and \$12000 invested in a 5% stock at 125; he transfers from the latter to the former a sum sufficient to make the incomes from the different stocks the same. What is the amount of money transferred?

Give (a) a purely arithmetic, (b) an algebraic, solution to this problem.

Discuss the merits of each solution.

Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN MATHEMATICS.

(FOR SPECIALISTS.)

Examiners : $\left\{ \begin{array}{l} \text{J. D. DICKSON, B.A.} \\ \text{W. J. ROBERTSON, B.A., LL.B.} \end{array} \right.$

1. "Of all the qualifications that go to make up the successful teacher, ability to question well is probably the most important. . . . It may be said, indeed, that the Art of Questioning is the Art of Teaching."—*McLellan*.

State concisely the objects to be aimed at and the results expected if you adopted this method of teaching arithmetic.

2. Indicate briefly your method of proving to a class the rule for finding the area of a spherical cap.

3. Outline a lesson on the summation of the following series :

(a) $1+2+3+\dots+n$ by the Binomial Theorem.

(b) $1\cdot2+2\cdot3+3\cdot4+\dots+n(n+1)$ by Mathematical Induction.

(c) $1^2+2^2+3^2+\dots+n^2$ by the Method of Indeterminate Coefficients.

4. Explain your method of teaching a class the numerically greatest term in the expansion of $(a+x)^n$, n being a positive integer.

5. Describe a rectilineal figure which shall be similar to one and equal to another given rectilineal figure. Euc. VI., 25.

Illustrate your method of teaching Geometry to a Senior Leaving Class in dealing with the above problem.

6. Discuss fully, as with a class, the "Ambiguous Case" in the solution of triangles.

[OVER.]

7. An agent received a consignment of wheat, which he sold, charging 2% commission. With the net proceeds, after deducting his commission at $1\frac{1}{2}\%$ and prepaying freight at 25 cents a cwt., he bought sugar at $4\frac{3}{4}$ cents a pound. The agent's total commission was \$70. Find the number of pounds of sugar bought.

Give (a) a purely arithmetic, (b) an algebraic, solution to this problem.

Discuss the merits of each solution.

Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN CLASSICS.

(FOR PASS CANDIDATES.)

Examiners : { F. C. COLBECK, B.A.
 { W. BRIDEN, B.A.

NOTE.—*Those taking Latin only will omit question 6.*

Those taking Greek will omit questions 4 (a), and 5.

1. “Teach one thing on the basis of another that is already known; for the mind advances to new knowledge on the basis of what it already knows. Knowledge is an organic growth, not a mechanical one.”—*Laurie*.

(a) What knowledge would you expect a boy of thirteen or fourteen years to have which could be made such a basis for beginning Latin?

(b) To what extent could you make use of his previous knowledge in teaching the following lesson :

- (i) Puer puellam amat.
- (ii) Puella agricolae puerum amat.
- (iii) Nautam non amamus.

(c) What would be your chief difficulties? Show how you would meet them in your teaching.

2. In a lesson prepared by a class of beginners the following sentences occurred :—

- (i) They had taken forty-three towns and about two hundred villages.
- (ii) Two legions, the eleventh and sixteenth, will be left on the other bank.
- (iii) They have three months' grain.

Three boys, not the best in the class, translate them as follows :

- (i) Oppida quadraginta et tres et de ducentis vicis ceperunt.
- (ii) Duae legiones, undecimi et sexti decimi in ripam alteram relinquent.
- (iii) Tria menses frumenta habent.

Show in detail how you would proceed in each case to obtain a correct translation.

[OVER.]

3. "His rebus gestis, Labieno in continente cum tribus legionibus et equitum milibus duobus relicto, ut portus tueretur et rem frumentariam provideret, quaeque in Gallia gererentur, cognosceret consiliumque pro tempore et pro re caperet, ipse cum quinque legionibus et pari numero equitum, quem in continente reliquerat, ad solis occasum naves solvit et leni Africo provectus, media circiter nocte vento intermisso, cursum non tenuit et longius delatus aestu orta luce sub sinistra Britanniam relictam conspexit. Tum rursus aestus commutationem secutus remis contendit, ut eam partem insulae caperet qua optimum esse egressum superiore aestate cognoverat."

The boy called upon to translate the first sentence begins: "These things having been done, Labienus having been left on the continent with three legions and two thousand cavalry that he might defend the harbors, etc."

(a) Would you allow him to finish the sentence in this strain? Give reasons for your answer.

(b) How would you proceed to get an idiomatic translation from him?

(c) In case you had special reason to expect that he would begin in some such way as is indicated above, and you wished to prevent his doing so, what steps would you take to secure his beginning with an idiomatic English version?

(d) Give what you would consider a good idiomatic translation of this passage for a boy in a Junior Leaving Class.

4. Base on the passage in No. 3 above:

(a) a lesson on the Perfect Participle;

(b) a lesson on the common uses of the Ablative.

5. You have a class for Pass Matriculation the members of which have passed the Primary examination in Latin. Write ten short Latin sentences suitable for a first lesson in *oratio obliqua*. Let the sentences be very simple apart from the peculiarities of the indirect speech. Teach the lesson.

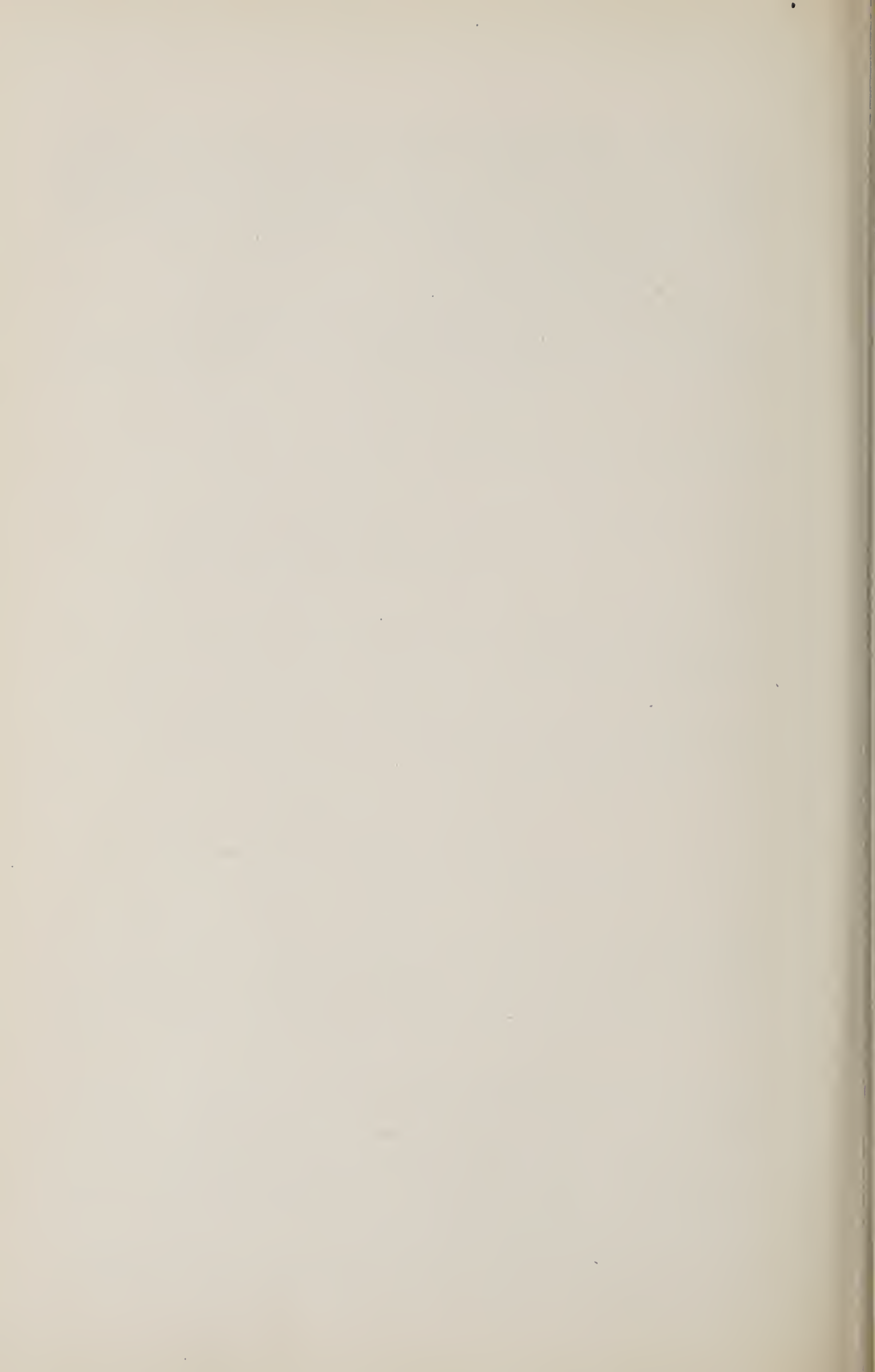
6. Ἄνὴρ κατελείπετο διὰ τὸ μηκέτι δύνασθαι πορεύεσθαι. καὶ ἐγὼ τὸν μὲν ἄνδρα τοσοῦτον ἐγίγνωσκον ὅτι εἰς ἡμῶν εἴη· ἡνάγκασα δὲ σὲ τοῦτον ἄγειν, ὥς μὴ ἀπόλοιτο· κὶ γάρ, ὥς ἐγὼ οἶμαι, πολέμιοι ἡμῖν ἐφείποντο. συνέφη τοῦτο ὁ ἄνθρωπος. Οὐκοῦν, ἔφη ὁ Ξενοφῶν, ἐπεὶ προὔπεμψά σε, καταλαμβάνω αὐτὴς σὺν τοῖς ὀπισθοφύλαξι προσιὼν βόθρον ὀρύττοντα ὥς κατορύξοντα τὸν ἄνθρωπον· καὶ, ἐπιστάς ἐπήνουν σε; ἐπεὶ δὲ παρεστηκότων ἡμῶν συνέκαμψε τὸ σκέλος ὁ ἀνὴρ, ἀνέκραγον οἱ παρόντες, ὅτι ζῇ ἁνὴρ, σὺ δ' εἶπας Ὅποσα γε βούλεται· ὥς ἐγώ γε αὐτὸν οὐκ ἄξω· ἐνταῦθα ἔπαισά σε.

(a) The above passage has been set a class for translation. Teach the lesson. Show how you would draw the attention of the class to some expressions in this passage which illustrate differences and similarities between :

- (i) Greek and English;
- (ii) Greek and Latin.

What value do you attach to such an exercise ?

(b) Make this passage the basis of a lesson on the use of the Participle in Greek.



Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN CLASSICS.

(FOR SPECIALISTS.)

Examiners : { F. C. COLBECK, B.A.
W. BRIDEN, B.A.

1. "Teach one thing on the basis of another that is already known; for the mind advances to new knowledge on the basis of what it already knows. Knowledge is an organic growth, not a mechanical one."—*Laurie*.

(a) What knowledge would you expect a boy of thirteen or fourteen years to have which could be made such a basis for beginning Latin?

(b) To what extent could you make use of his previous knowledge in teaching the following lesson:

- (i) Puer puellam amat.
- (ii) Puella agricolae puerum amat.
- (iii) Nautam non amamus.

(c) What would be your chief difficulties? Show how you would meet them in your teaching.

2. In a lesson prepared by a First Form Class the following sentences occurred:

- (i) They had taken forty-three towns and about two hundred villages.
- (ii) Two legions, the eleventh and sixteenth, will be left on the other bank.
- (iii) They have three months' grain.

Three boys, not the best in the class, translate them as follows:

- (i) Oppida quadraginta et tres et de ducentis vicis ceperunt.
- (ii) Duae legiones, undecimi et sexti decimi in ripam alteram relinquent.
- (iii) Tria menses frumenta habent.

Show in detail how you would proceed in each case to obtain a correct translation.

[OVER.]

3. "Subito Labienus duabus portis omnem equitatum emittit; praecipit atque interdicat, proterritis hostibus atque in fugam coniectis—quod fore sicut accidit videbat—unum omnes peterent Indutiomarus, neu quis quem prius vulneret, quam illum interfectum viderit, quod mora reliquorum spatium nactum illum effugere nolebat; magna proponit iis, qui occiderint, praemia; submittit cohortes equitibus subsidio. Comprobat hominis consilium fortuna; et cum unum omnes peterent, in ipso fluminis vado deprehensus Indutiomarus interficitur, caputque ejus refertur in castra; redeuntes equites, quos possunt, consectantur atque occidunt. Hac re cognita, omnes Eburonum et Nerviorum quae convenerant copiae discedunt, pauloque habuit post id factum Caesar quietorem Galliam."

(a) This passage has been a lesson assigned for preparation. The members of the class all say that they have found the first sentence difficult. Some say they have found it hard to understand; others think they understand it, but say they cannot translate it to their own satisfaction. Show in detail how you would try to meet the difficulty.

(b) Base on this passage a lesson on the Participle in Latin.

4. "Mortuo Tullo, res, ut institutum jam inde ab initio erat, ad patres redierat, hique interregem nominaverant; quo comitia habente, Ancum Marcium regem populus creavit; patres fuere auctores. Numae Pompilii regis nepos, filia ortus, Ausus Marcius erat; qui ut regnare coepit, et avitae gloriae memor, et quia proximum regnum—cetera egregium—ab una parte haud satis prosperum fuerat, aut neglectis religionibus, aut prave cultis, longeque antiquissimum ratus, sacra publica, ut ab Numa instituta erant, facere, omnia ea ex commentariis regis pontificem in album elata proponere in publico jubet."

(a) Why would you consider sight-reading a valuable exercise?

(b) The above passage has been selected for sight-work for an Honor Class. Show, in as full detail as time will permit, how you would conduct the lesson.

5. (a) Write a series of sentences (in Latin and Greek respectively) suitable for the basis of a lesson on :

(i) The Latin Infinitive.

(ii) The Greek Infinitive.

(b) Teach one of the lessons.

6. “ At domus interior gemitu miseroque tumultu
Miscetur ; penitusque cavae plangoribus aedes
Femineis ululant ; ferit aurea sidera clamor.
Tum pavidæ tectis matres ingentibus errant,
Amplexæque tenent postes, atque oscula figunt.
Instat vi patria Pyrrhus ; nec claustra, neque ipsi
Custodes sufferre valent. Labat ariete crebro
Janua, et emoti procumbunt cardine postes.
Fit via vi ; rumpunt aditus, primosque trucidant
Inmissi Danaï, et late loca milite complent.
Non sic, aggeribus ruptis cum spumeus amnis
Exiit, oppositasque evicit gurgite moles,
Fertur in arva furens cumulo, camposque per omnes
Cum stabulis armenta trahit.”

(a) You have satisfied yourself that your Honor Class understand this passage. Show how you would teach it as poetry.

(b) Give such a translation as, in your opinion, might be expected at the close of the lesson.

Education Department, Ontario

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

PSYCHOLOGY.

Examiners: { W. J. ROBERTSON, B.A., LL.B.
WM. PAKENHAM, M.A.

1. Explain and briefly discuss the different methods employed to obtain a knowledge of Psychological phenomena.

2. Distinguish between (a) Sensation and Perception ; (b) Apperception and Retention ; (c) Presentative and Representative Knowledge. Illustrate.

3. Upon what Psychological principles must the teacher build to secure the attention of his pupils ?

4. "Imagination is the power of producing ideas without any reference to our own past experience."

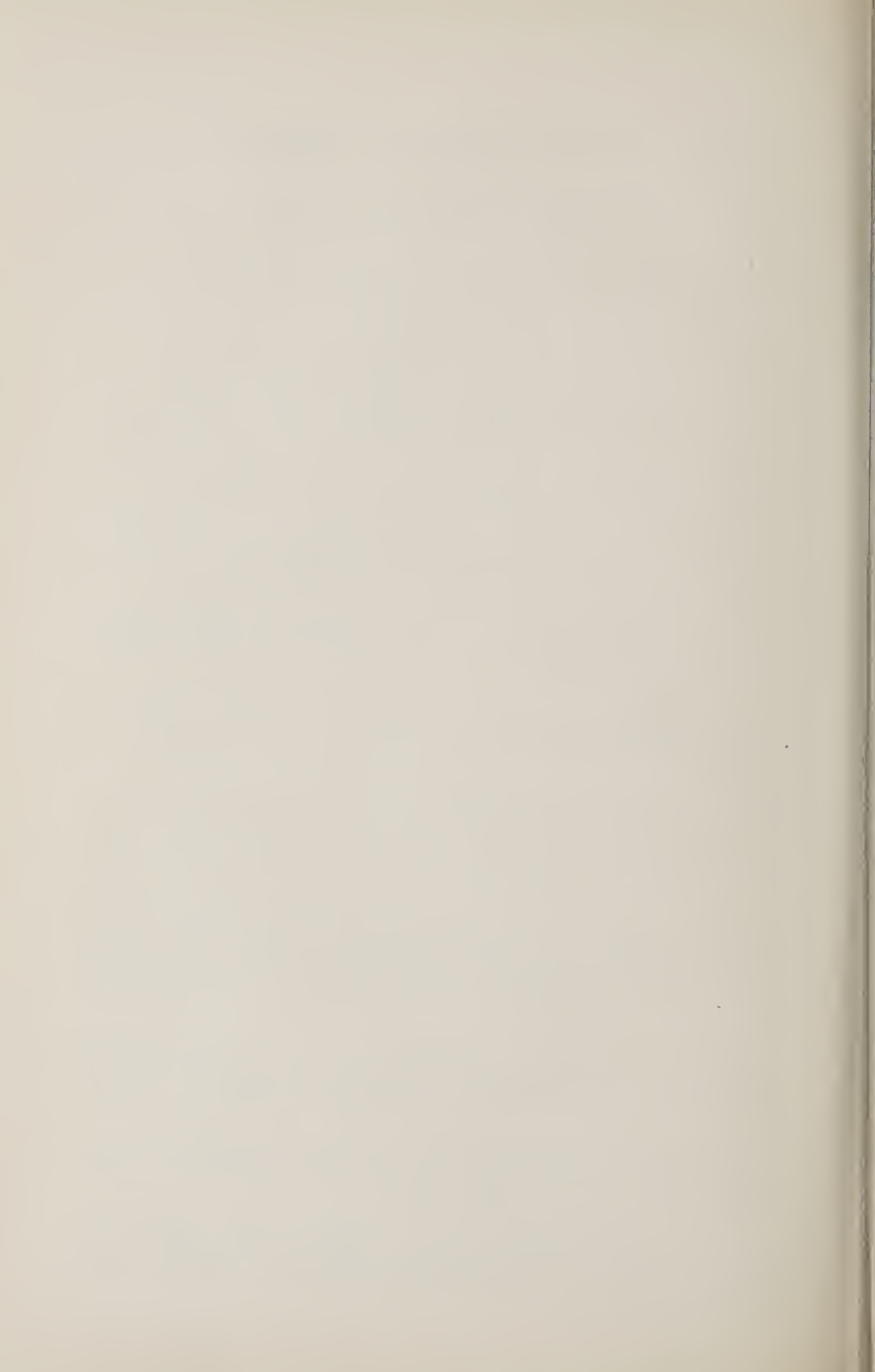
Discuss this statement, and show the relation between Sensation, Memory, and Imagination.

5. Distinguish between Analysis and Synthesis. Illustrate by reference to the part played by each in the Perception of an object—a tree, for instance. Show that they are the necessary complements of each other.

6. What Psychological principles would you apply, in giving a lesson to a young pupil on (a) The rudiments of Euclid ; (b) Magna Charta ; (c) Physical Geography. Illustrate.

7. Show, by illustrations, the important part played by Imagination in the study of Mathematics.

8. Show the intimate relation existing between Mind and Body, and point out any important educational principles that flow from a recognition of this relationship.



Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

SCHOOL ORGANIZATION AND MANAGEMENT.

Examiners: { JOSEPH MORGAN, M.A.
L. C. SMITH, B.A.

1. In making promotions, state what importance you would attach to each of the following:—(a) Results of written examinations, (b) age, (c) ability, (d) class-work.

2. Comment on the educational dangers likely to arise in dealing with (a) the emotions, and (b) the interest of the pupils; and state how these dangers may be avoided.

3. If you have two classes—one of the average age of eighteen years, the other of the average age of thirteen—state, with reasons, what course you would follow in each case as regards (a) motives, (b) punishments, (c) irregularities of attendance, (d) home-work.

4. How would you develop in pupils (a) courteous bearing, and (b) strict regard for truth?

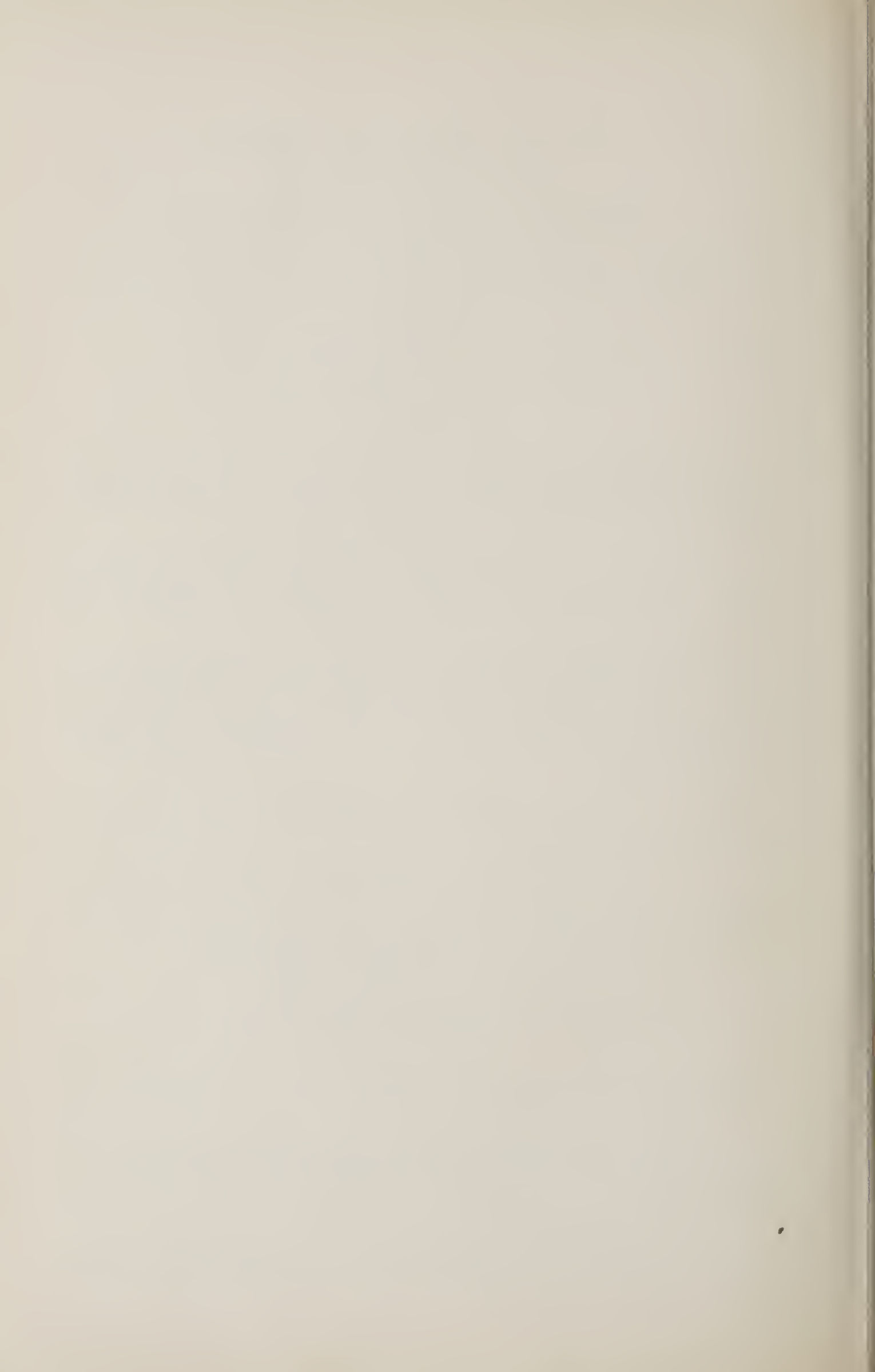
5. How would the discipline be affected by the following characteristics of the teacher:—

- (a) Rashness in charging pupils with offences,
- (b) An apologetic, non-confident manner,
- (c) A habit of giving indiscriminate praise,
- (d) Alternations of lenient and severe moods?

6. State, with reasons, what mode of procedure should be followed in each of the following cases:—

(a) Two boys of same age, the one of good previous record as to conduct, the other of an unsatisfactory record in this regard, both belonging to the same Form, have been found copying at the same examination.

(b) A pupil wilfully persists in committing petty annoyances, no individual instance, however, being serious enough to call for separate treatment.



Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

SCIENCE OF EDUCATION.

Examiners : { WM. PAKENHAM, B.A.
W. H. JENKINS, B.A.

1. Criticize, from the national and individual standpoints, the utilitarian tendencies of Spencer's view of education. Discuss the applicability of this view to any system of *popular* education.

2. "Individual education should be a repetition of civilization in little." Explain fully this principle and point out its limitations.

3. Give a scientific explanation of *habit* or *habitude*, discussing fully the importance of habit-forming in training the intellect, will and emotions.

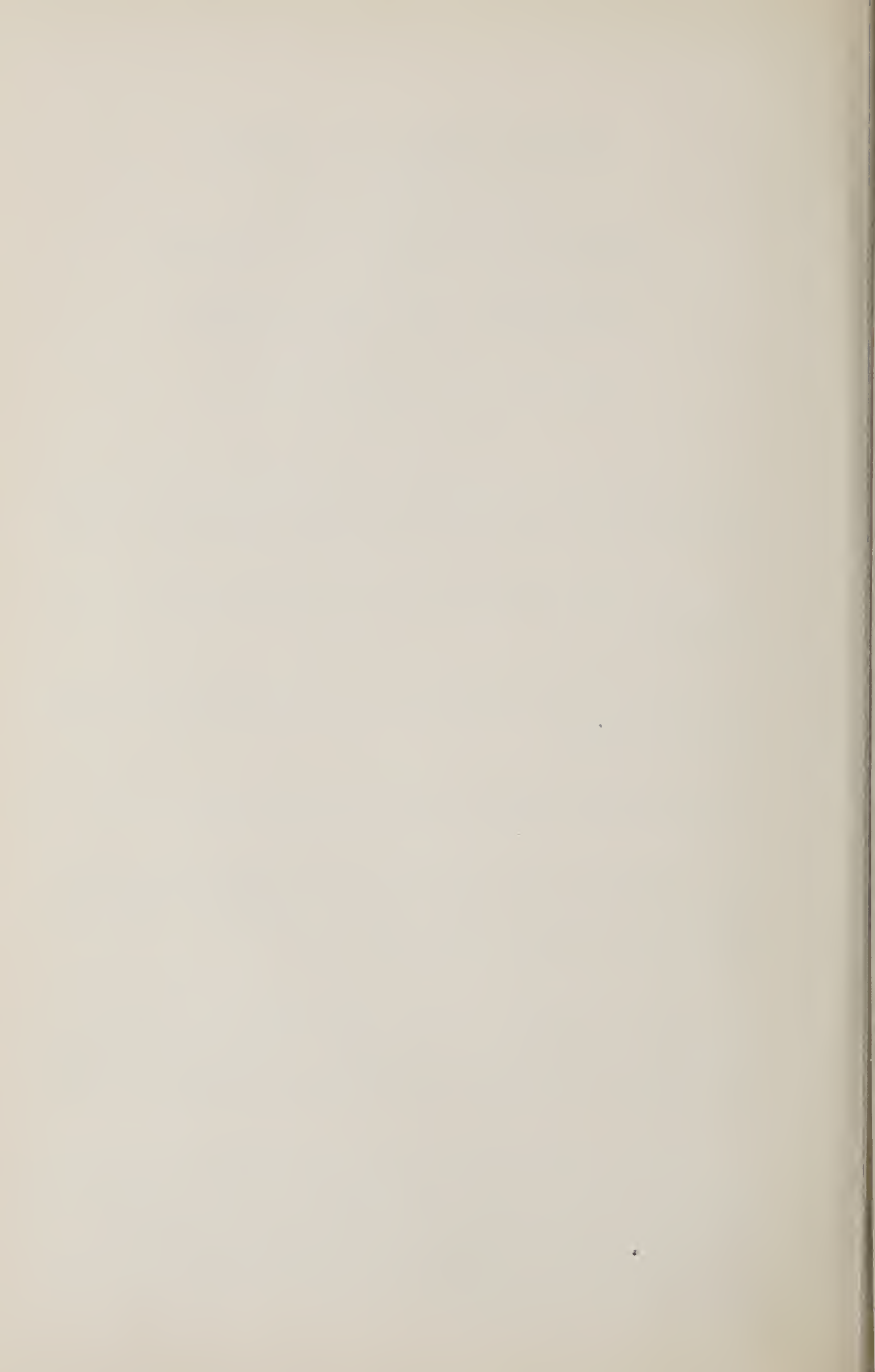
4. Point out what you consider to be the true relation of modern education to the physical life of the nation.

5. Speaking of the *humanities* in their broadest and widest sense, Spencer says: "As they occupy the leisure part of life, so should they occupy the leisure part of education." State fully your position as regards this statement.

6. "The worst feature of the modern mind, which, moreover, the system of education, by the passive storing-up of facts, accentuates, is the dispersion of thought." Discuss this statement pointing out fully its relation to the modern tendencies towards (a) specializing of subjects, (b) co-ordinating of subjects.

7. "The academic life offers endless privileges of education in every way because we are ever surrounded by men who possess knowledge or are in search of it, so that, though it may be unconsciously, we gain nourishment in such an atmosphere."

Apart from the ordinary work of the class-room, how might High Schools broaden and strengthen their educative influence? Offer practical suggestions.



Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN SCIENCE.

(FOR PASS CANDIDATES).

Examiners : { W. H. JENKINS, B.A.
J. D. DICKSON, B.A.

1. (a) Give a pupil necessary apparatus and set him at work with a definite object in view.

(b) Surround a pupil with the required conditions to make a discovery.

Which of these plans would you adopt in a lesson on the Porosity of Water? Justify your choice and teach the lesson according to the plan chosen.

2. Show, by a series of questions, supplying expected answers, how you would lead a Junior Leaving Class to a "simple notion of potential" in voltaic electricity.

3. A teacher has preceded the formal study of Sound by a series of experiments on vibrating rods, strings and membranes, calling attention to an essential property of such bodies. Discuss the advisability of such a plan and, assuming it to be a good one, indicate the subject matter of the next two lessons (of 45 minutes each); the pupils performing all necessary experiments.

4. Outline your special work in preparing students for, and indicate interrogatively your method of teaching Avogadro's Law to Junior Leaving students.

5. If you find manual dexterity and memorization of facts predominating as a result of individual laboratory work in Chemistry, what steps would you take to subordinate these to the real end for which Chemistry should be taught?

[OVER.]

6. In an introductory practical lesson in Zoology, indicate :—
(a) The nature of the work you would introduce;
(b) The assistance or directions you would give your pupils;
(c) How you would test the work done.

7. (a) What different method, if any, would you pursue in teaching a science of observation, from the method employed in an experimental science? Give reasons for your answer.

(b) In connection with the teaching of Botany, justify your views as to the use of illustrated text-books.

8. In a lesson on the *Hepatica* the following conversation, in part, takes place between the teacher [*T*] and the pupil [*P*] :—

T. What parts are present in this plant?

P. Root, stem, leaf and flower.

T. Where is the stem?

(Several pupils point to the flower-stalk.)

T. No, that is not a true stem. There is no stem in this plant.

P. Why is this not called a stem?

T. Because there are no leaves or branches on it. It is called a scape. Note the downy hairs on the scape. Turn back the green part of the flower and notice a short bit of the flower-stalk between the green and pinkish parts of the flower. This shows us that the green part is not a true calyx. It is called an involucre of bracts. How many stamens?

P. They are numerous.

T. To what are they attached?

P. They are attached to the receptacle.

Criticise the method pursued above and indicate by question and answer, where necessary, your own method.

Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN SCIENCE.

(FOR SPECIALISTS.)

Examiners : { W. H. JENKINS, B.A.
 { J. D. DICKSON, B.A.

1. (a) A Senior Leaving student beginning the course in September has no knowledge of Botany except that required for the Primary examination. Outline what you consider the best work for him during the first four months; give reasons for your opinion and state how you would take the work up.

(b) What are the objections to the type-method of study of plants and animals, and how would you minimize the evils resulting therefrom?

2. (a) Give your method of dealing with the Fern, so that a student may have a clear conception of this form and its life-history.

(b) Teach an introductory lesson on Plant Histology. (It may be assumed that students know how to manipulate the compound microscope.)

3. "Biology deals with life; the senses and the mind must be constantly alert to detect its manifestations and correctly estimate their significance. The mental training resulting is of the highest disciplinary and practical value."

Show how you would conduct an experimental lesson on the special sense organs of any common insect, in order to secure this mental training.

4. A student wishes to know why the formula NH_3 is assigned to ammonia. What circumstances would determine you to give an answer immediately or to defer for a more suitable occasion? Having decided the circumstances warrant an immediate answer, how would you proceed?

[OVER.]

5. Give a lesson indicating your method of making the transition from a laboratory examination of the elements and their compounds to the qualitative analysis of salts.

6. "Experiments should illustrate or verify principles previously discussed in the class-room. Life is too short to admit of teaching Physics inductively to any great extent; of re-discovering laws which have required ages to discover."—*Gage*.

Examine the two methods indicated above in their bearing upon the educational value, the practical utility, and the æsthetic enjoyment, derived from a study of Physics.

7. You are required to teach a lesson on the electrical resistance of wires. State how you would do this in following each of the methods indicated in question 6.

Education Department, Toronto.

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PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN ENGLISH.

(FOR PASS CANDIDATES.)

Examiners: { L. C. SMITH, B.A.
F. C. COLBECK, B.A.

Now fades the last long streak of snow,
Now burgeons every maze of quick
About the flowering squares, and thick
By ashen roots the violets blow.

Now rings the woodland loud and long,
The distance takes a lovelier hue,
And drowned in yonder living blue
The lark becomes a sightless song.

Now dance the lights on lawn and lea,
The flocks are whiter down the vale,
And milkier every milky sail
On winding stream or distant sea,

Where now the seamew pipes, or dives
In yonder greening gleam, and fly
The happy birds that change their sky
To build and brood ; that live their lives

From land to land ; and in my breast
Spring wakens too ; and my regret
Becomes an April violet,
And buds and blossoms like the rest.

IN MEMORIAM, CXV.

1. On the above poem teach a lesson for a Junior Leaving Class, under the following headings :—

- (a) Plan of the poem in tabulated form, as concise as possible ;
- (b) Explanations necessary for full comprehension ;
- (c) Special merits that exhibit the art or characteristics of the poet.

2. Take as a subject, “ *Queen Elizabeth*,” and arrange paragraph topics and sub-topics for an essay in a class for the Primary Examination. Add such instructions as you deem necessary for the observance of the laws of paragraphing.

[OVER.]

3. You are to teach a lesson on (a) The Uses of the *—ing* Forms, and (b) The Uses of the Infinitive. Arrange in systematic order the uses of each, and employ the following sentences as examples: be careful to show as clearly as possible the relation of the word employed for illustration :—

- (a) (i) While crossing the stream the man was drowned.,
- (ii) In crossing the stream the man was drowned.
- (iii) Crossing the stream the man was drowned.
- (iv) In the crossing of the stream the man was drowned.
- (v) The crossings are wet.
- (vi) The running stream is near.
- (vii) The tap was left running.
- (b) (i) I can come.
- (ii) I did come.
- (iii) I shall come.
- (iv) They were to come to-day.
- (v) Let us come.
- (vi) He bids me come,
- (vii) You had better come.
- (viii) You had to come.
- (ix) There are many books to read.
- (x) What went ye out to see? What went ye out for to see?
- (xi) Better dwell in the midst of alarms
Than reign in this horrible place.

4. What do you regard as the chief faults in the reading of Canadian students? How would you endeavor to remedy them?

5. Teach a lesson to a class for the Primary Examination on, "How we are Governed"

Education Department, Toronto.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN ENGLISH.

(FOR SPECIALISTS.)

Examiners: { L. C. SMITH, B.A.
F. C. COLBECK, B.A.

K. Rich. I have been studying how I may compare
This prison where I live unto the world :
And, for because the world is populous,
And here is not a creature but myself,
I cannot do it ;—yet I'll hammer't out.
My brain I'll prove the female to my soul,
My soul the father : and these two beget
A generation of still-breeding thoughts,
And these same thoughts people this little world,
In humors like the people of this world,
For no thought is content. The better sort—
As thoughts of things divine—are intermixed
With scruples, and do set the Word itself
Against the Word :
As thus, *Come, little ones ;* and then again,
It is as hard to come as for a camel
To thread the postern of a small needl's eye.
Thoughts tending to ambition, they do plot
Unlikely wonders ; how these vain weak nails
May tear a passage through the flinty ribs
Of this hard world, my ragged prison walls ;
And, for they cannot, die in their own pride.
Thoughts tending to content flatter themselves
That they are not the first of fortune's slaves,
Nor shall not be the last ; like silly beggars,
Who, sitting in the stocks, refuge their shame
That many have, and others must sit there ;
And in this thought they find a kind of ease
Bearing their own misfortune on the back
Of such as have before endured the like.

ACT V., SCENE V., RICHARD II.

1. On the above passage teach a lesson for a Senior Leaving Class, under the following heads :—

- (a) Tabulated plan of the successive steps in the argument.
- (b) Explanations.
- (c) Inferences as to the character of the speaker.

[OVER.]

2. You are to give a lesson to a Junior Leaving Class on Relatives and the kinds of clauses they may introduce. Your students furnish you with the following examples:—

- (i) He [that, *mindful* (of what he brought) to adorn her *with*, had let one finger lightly touch her throat], replied.
- (ii) All the heavens blazed with thunder such (as seemed *shoutings* of all the sons of God).
- (iii) And he to (whom she told her sins), or (what Her *all but* utter whiteness held for sin), Spake often.
- (iv) The thunder-clouds close o'er it (*which when* rent,) The earth is covered thick with other clay.
- (v) (Whatever he says) I shall not believe him.
- (vi) I came (where he lives).
- (vii) I came to the house (*where* he lives.)
- (viii) As many (as came) were pleased.
- (ix) I asked him (what he wanted), and repeated (what you said).
- (x) For Merlin once had told her of a charm,
(*The which* if any wrought on anyone
With *woven* paces and with waving arms,)
The man so *wrought* on ever seemed to lie
Closed in the four walls of a hollow tower.
- (xi) (What I saw) was not worth *turning* out of the way of.

- (a) Make a classification of the Relatives in these sentences.
- (b) Employ as examples of the kinds of clauses the parts enclosed in brackets.
- (c) If the student has, in any instance, not bracketed the clause properly, remove his difficulty for him.
- (d) If, in any instance, the selection is not a Relative Clause, make it plain to the class.
- (e) A student asks for explanations on the construction of the words italicized. How would you proceed to meet his difficulties?

3.

Now fades the last long streak of snow,
Now burgeons every maze of quick
About the flowering squares, and thick
By ashen roots the violets blow.

Now rings the woodland loud and long,
The distance takes a lovelier hue,
And drowned in yonder living blue
The lark becomes a sightless song.

Now dance the lights on lawn and lea,
The flocks are whiter down the vale,
And milkier every milky sail
On winding stream or distant sea,

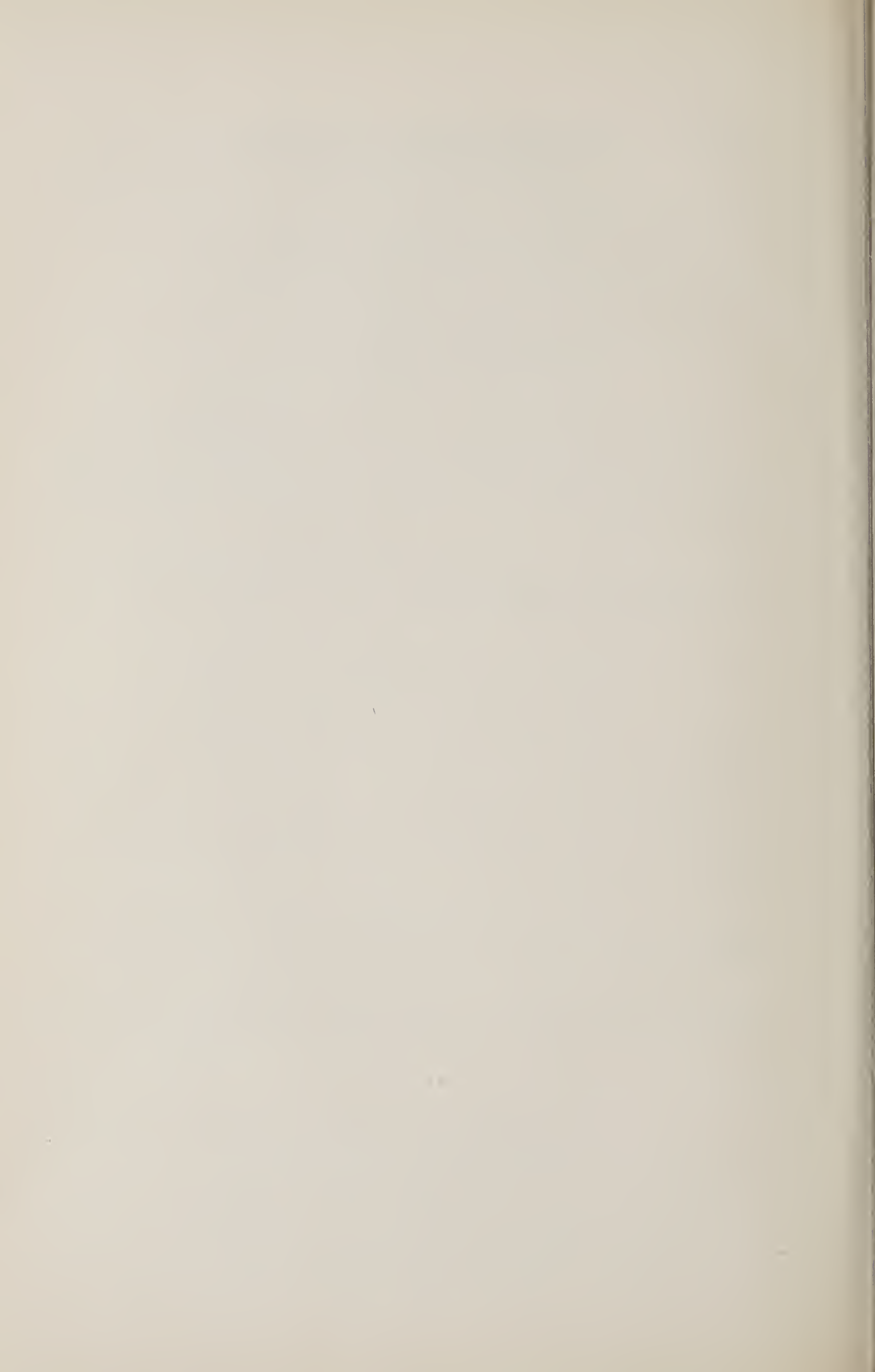
Where now the seamew pipes, or dives
In yonder greening gleam, and fly
The happy birds that change their sky
To build and brood ; that live their lives

From land to land ; and in my breast
Spring wakens too ; and my regret
Becomes an April violet,
And buds and blossoms like the rest.

IN MEMORIAM, CXV.

You have the above passage as a lesson for Supplementary Reading in a Junior Leaving Class. In a brief running paraphrase, show what you would expect from the class, as a proof that they had mastered the thought.

4. Teach a lesson, for Senior Leaving, on Symbolism, as seen in the conjugation of the English verb.



Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN FRENCH AND GERMAN.

(FOR PASS CANDIDATES.)

Examiners : { L. H. ALEXANDER, M.A.
 { WM. PAKENHAM, M.A.

1. (a) Explain the method by which you would teach a class the forms of the regular verbs in French.

(b) Show how you would conduct a review exercise on such forms, and illustrate with a few test examples.

2. —D'où viens-tu ? dit Balthazar.

—De là-haut, répondit-elle. Gudule a peur du tonnerre ; comme il grondait encore quand elle est montée se coucher, elle m'a priée de lui tenir compagnie, et j'ai dormi dans sa chambre, sur un fauteuil. Je me suis réveillée, j'ai vu le beau temps revenu, je suis descendue pour me mettre au lit ; et j'allais m'assurer que vous n'aviez pas oublié de tirer les verrous, lorsque ce monsieur m'a arrêtée Et il m'a fait joliment peur !

(a) Teach this passage as a lesson in translation, and add a version you would accept.

(b) Show how this extract may be used with a class studying the verbs, so as to impress some of the fundamental grammatical points of their use.

3. Outline a lesson on the uses of the prepositions governing dative and accusative in German for pupils who have made such mistakes as :—

(a) Suche die Wörter in einem Wörterbuch.

(b) Der Baum steht auf dem Ufer des Flusses.

(c) Der Hund lief lange hinter den Wagen.

[OVER.]

4. With the following sentences and similar ones teach a review lesson on the uses of the personal pronouns and their substitutes in German :—

- (a) She is my cousin ; do you know her ?
- (b) Don't you remember it, my son ?
- (c) You, who are his friend, blamed him for it.
- (d) I certainly could not trust *him*.
- (e) It was I who told him yesterday.

5. (a) State concisely what you consider an ideal working aim for our schools in the teaching of Moderns.

(b) How soon, then, and with what method would you teach (i) Sight Translation, (ii) Dictation, (iii) Conversation, (iv) Composition ?

Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN FRENCH AND GERMAN.

(FOR SPECIALISTS.)

Examiners : { L. H. ALEXANDER, M.A.
 { WM. PAKENHAM, M.A.

1. Am Marktplatz machte man Halt und legte die Leiche des Ritters auf dem Stein vor der Schmiede wie auf einem Paradebett aus, dasz Jeder sich überzeugen konnte, es sei auch wirklich der Dachsburger und kein Anderer, den Michael gefällt. Es zeigte sich, dasz der Ritter auf's Haar so lang war wie der Stein, nämlich sieben Fusz, gleich als sei der Stein, der schon seit undenklicher Zeit dort lag, eigens für ihn zurecht gehauen worden.

(a) Teach a lesson on the translation of this passage, and give a version you would accept.

(b) Make this the basis of a suggestive lesson to Honor students on the comparison of idioms in French and German.

2. (a) Show how you would teach the idioms :

- (i) Den Kopf schüttelnd, er gab mir die Hand.
- (ii) Nun, das wäre ja recht schön.
- (iii) Lassen Sie sich von mir rathen.

(b) Criticise the dictum: An idiom never has any literal meaning, and the attempt to reproduce it literally is a meaningless exercise.

3. Outline a lesson on the translation of *what* into French.

4. Show, by suggestive notes with examples, how you would make each branch of language-study (Grammar, Translation, Dictation, etc.,) bear upon giving your students *a real acquaintance with the genius* as well as the forms of the language.

[OVER.]

5. (i) If you would go, I should go, too.
(ii) If I should see him, I shall tell him so.
(iii) *He* should go, and then *she* would.
(iv) We should like a house, which would not be too large.
(v) He would always read to me, till I should fall asleep.

(a) Give a lesson with these sentences to advanced students on the translation of *should* and *would* into French.

(b) Test the pupils finally by a few other examples.

Education Department, Ontario.

MAY EXAMINATIONS, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

HISTORY OF EDUCATION.

Examiners : $\left\{ \begin{array}{l} \text{W. BRIDEN, B.A.} \\ \text{L. H. ALEXANDER, M.A.} \end{array} \right.$

1. "Thus he (Comenius) struck the key-note of the science of education."—*Quick*.

(a) What, according to Mr. Quick, is the key-note?

(b) Show, by examining the system of Comenius, the truth of Mr. Quick's statement.

2. (a) Describe the Port Royal system of education, and point out wherein it differed from the Jesuit system.

(b) Discuss the value and feasibility of the Port Royal system.

3. (a) In what particulars do the so-called Innovators in education agree?

(b) What are the distinctive merits of Ratke as an Innovator?

4. Give an account of the Jacototian system, commenting on its merits and weaknesses.

5. (a) State four important principles of intellectual education laid down by Herbert Spencer.

(b) Discuss any two of these principles as to their soundness, and show how you would make a practical application of them in teaching.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN MATHEMATICS.

(FOR PASS CANDIDATES.)

Examiners : $\left\{ \begin{array}{l} \text{J. D. DICKSON, B.A.} \\ \text{W. J. ROBERTSON, B.A., LL.B.} \end{array} \right.$

1. Teach a lesson on the units of measurement, and lead your class on to find

- (a) the area of a square whose side is 6 ft.;
- (b) the volume of a rectangular parallelopiped whose length, breadth and thickness are respectively 10 ft., 6 ft., and 4 ft.

2. Outline a series of lessons indicating your order and method of teaching the different rules in vulgar fractions.

3. To describe a parallelogram equal to any given rectilineal figure, and having an angle equal to a given angle. (Euclid I., 45.)

- (a) How would you teach the above proposition?
- (b) Where would you expect pupils to make mistakes, and how would you correct them?

4. Indicate your method of teaching a class how to find the square root of an algebraic expression.

5. How would you prove to a class the truth of the rule for subtraction in algebra: "Change the sign of the subtrahend and add"?

6. Explain how you would teach

- (a) the method of finding the H. C. F. of two algebraic expressions;
- (b) that a quadratic equation has two and only two roots.

[OVER.]

7. A class is unable to solve the following problem:—

“A person makes 7% clear on his money after paying an income tax of two cents on the dollar, by investing in 5% stock. Find the market value of the stock if a broker charged $\frac{1}{8}\%$ for transacting the business.”

How would you proceed?

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN MATHEMATICS.

(FOR SPECIALISTS.)

Examiners : $\left\{ \begin{array}{l} \text{J. D. DICKSON, B.A.} \\ \text{W. J. ROBERTSON, B.A., LL.B.} \end{array} \right.$

1. Teach an introductory lesson on Notation to a Senior Leaving class, and show how you would

(a) change 8976 from the base 10 to the base 7;

(b) express $\frac{13}{16}$ as a radix fraction in scale 6.

2. A class can find the volume of a cone, but cannot solve the following problem:—

“How many gallons of water will a circular vat contain that measures 12 ft. across the bottom, 15 ft. across the top, and 6 ft. deep?”

How would you proceed?

3. How would you teach

(a) that, in algebraic multiplication, like signs give plus and unlike signs give minus;

(b) that the algebraic expression $ax^2 + bx + c$ has the same sign as a except when the roots of the equation $ax^2 + bx + c = 0$ are real and different, and x lies between them?

4. It is required to find what value of r will make the number of combinations of n things r at a time the greatest.

How would you teach the method of finding r to a Senior Leaving class?

5. Teach a lesson on the expansions of $\sin(A + B)$, $\cos(A + B)$, $\sin(A - B)$ and $\cos(A - B)$, and show how you would prove that these expansions are not independent. [OVER.]

6. Teach a lesson showing how you would

- (a) change a system of logarithms having a given base to another system having a different base ;
- (b) adapt the formula $c^2 = a^2 + b^2 - 2ab \cos C$ to logarithmic computation by means of a subsidiary angle.

7. (a) Show how you would circumscribe a regular pentagon about a given circle (Euclid IV., 12).

(b) How would you lead your class, from the above proposition, to see that if any regular rectilineal figure can be inscribed in a circle, a regular rectilineal figure of the same number of sides can be circumscribed about it ?

Education Department, Ontario

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN CLASSICS.

(FOR PASS CANDIDATES.)

Examiners: { F. C. COLBECK, B.A.
W. BRIDEN, B.A.

NOTE.—*Candidates taking Greek will omit question 4.*

1. Give a plan of a first lesson in Latin to a class the members of which have just passed the Entrance examination.

2. (a) Show how much you would attempt in your first lesson on the uses of the Subjunctive in Latin.

(b) Teach the lesson.

3. In a lesson on Composition the following sentences occur :

- (i) He was informed that all who were able to bear arms were assembling in one place.
- (ii) Having followed the enemy a mile he sent a scout to ascertain what they were doing.
- (iii) He thinks that the British general can be persuaded to fight us.

The pupils called on to translate them do so as follows:—

- (i) Certus factus est omnes qui arma ferre poterant in uno loco convocare.
- (ii) Hostibus millia passuum secutis, exploratorem cognoscere quid faciebant misit.
- (iii) Putat ducem Britannorum persuaderi posse nos pugnare.

Show how you would proceed in each case to obtain a correct translation.

4. “Quanto erat in dies gravior atque asperior oppugnatio, et maxime quod magna parte militum confecta vulneribus res ad paucitatem defensorum pervenerat, tanto crebriores litterae

[OVER.]

nuntiique ad Caesarem mittebantur: quorum pars deprehensa in conspectu nostrorum militum cum cruciatu necebatur. Erat unus intus Nervius nomine Vertico, loco natus honesto, qui a prima obsidione ad Ciceronem perfugerat suamque ei fidem praestiterat. Hic servo spe libertatis magnisque persuadet praemiis ut litteras ad Caesarem deferat. Has ille in jaculo illigatas effert et Gallus inter Gallos sine ulla suspicione versatus ad Caesarem pervenit. Ab eo de periculis Ciceronis legionisque cognoscitur."

(a) This passage has been prepared by a Junior Leaving class. Show how you would teach this lesson to secure from the class a good idiomatic translation and a mastery of the syntax. Show, by an idiomatic translation of this passage, the character of the work you would expect from the pupils.

(b) "No exercise in Latin Composition excites the interest or supplies the discipline that retroversion of the English of past chapters into Latin does."—*Laurie*.

- (i) Why is this true?
- (ii) Write five short sentences, based on the vocabulary and idioms of this passage, for a lesson in Composition.
- (iii) Show, by a translation of these sentences into Latin, the character of the work you would expect from the pupils.

5. Κοτυωρίτας δέ, οὓς ὑμετέρους φατὲ εἶναι, εἴ τι αὐτῶν εἰλήφαμεν, αὐτοὶ αἴτιοι εἰσιν· οὐ γὰρ ὡς φίλοι προσεφέροντο ἡμῖν, ἀλλὰ κλείσαντες τὰς πύλας οὔτε εἰσὼ ἐδέχοντο οὔτε ἔξω ἀγορὰν ἔπεμπον· ἡτιῶντο δὲ τὸν παρ' ὑμῶν ἀρμοστὴν τούτων αἴτιον εἶναι. ὁ δὲ λέγεις βία παρελθόντας σκηνοῦν, ἡμεῖς ἡξιούμεεν τοὺς κάμνοντας εἰς τὰς στέγας δέξασθαι· ἐπεὶ δὲ οὐκ ἀνεῳγον τὰς πύλας, ἥ ἡμᾶς ἐδέχετο αὐτὸ τὸ χωρίον ταύτῃ εἰσελθόντες ἄλλο μὲν οὐδὲν βίαιον ἐποιήσαμεν, σκηνοῦσι δ' ἐν ταῖς στέγαις οἱ κάμνοντες τὰ αὐτῶν δαπανῶντες, καὶ τὰς πύλας φρουροῦμεν, ὅπως μὴ ἐπὶ τῷ ὑμετέρῳ ἀρμοστῇ ᾧσιν οἱ κάμνοντες ἡμῶν, ἀλλ' ἐφ' ἡμῖν ἢ κομίσασθαι ὅταν βούλωμεθα. οἱ δὲ ἄλλοι, ὡς ὁράτε, σκηνοῦμεν ὑπαίθριοι ἐν τῇ τάξει, παρασκευασμενοί, ἂν μὲν τις εὖ ποιῇ, αὐτ' εὖ ποιεῖν, ἂν δὲ καλῶς, ἀλέξασθαι.

(a) Teach this lesson, which the class has prepared, so as to secure from the class a good idiomatic translation and a mastery of the syntax. Show, by an idiomatic translation of the passage, the character of the work you would expect from the pupils.

(b) "No exercise in Latin Composition excites the interest or supplies the discipline that retroversion of the English of past chapters into Latin does."—*Laurie*.

- (i) Is this equally true with regard to Greek? Give reasons for your answer.
- (ii) Write five short English sentences, based on the vocabulary and idioms of this passage, for a lesson in Composition.
- (iii) Show, by a translation of these sentences, the character of the work you would expect from the pupils.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN CLASSICS.

(FOR SPECIALISTS.)

Examiners : { F. C. COLBECK, B.A.
W. BRIDEN, B.A.

1. (a) "A Latin class without a blackboard is an anachronism."—*Laurie*.

You are about to conduct a review lesson on the third declension with a class of beginners. Show, with reasons, in what order and how you would present the following words on the blackboard: *animal, rex, frater, hiems, civitas, carmen, homo, turris, hostes, miles*.

(b) Teach the lesson.

2. (a) Classify the ordinary Conditional Sentences in Greek, giving examples.

(b) You have a Greek class, the members of which have a very good knowledge of the Conditional Sentence in English and also in Latin. Indicate how much you would attempt with them in a first lesson on the Conditional Sentence in Greek.

(c) Teach the lesson.

3. Ciceronem pro ejus merito legionemque collaudat; centuriones singillatim tribunosque militum appellat, quorum egregiam fuisse virtutem testimonio Ciceronis cognoverat. De casu Sabini et Cottae certius ex captivis cognoscit. Postero die contione habita rem gestam proponit, milites consolatur et confirmat: quod detrimentum culpa et temeritate legati sit acceptum hoc aequiore animo ferendum docet, quod, beneficio deorum immortalium et virtute eorum expiato incommodo, neque hostibus diutina laetatio neque ipsis longior dolor relinquatur.

Interim ad Labienum per Remos incredibili celeritate de victoria Caesaris fama defertur, ut, cum ab hibernis Ciceronis millia passuum abesset circiter sexaginta, eoque post horam

[OVER.]

nonam diei Caesar pervenisset, ante mediam noctem ad portas castrorum clamor oreretur, quo clamore significatio victoriae gratulatioque ab Remis Labieno fieret.

(a) Teach this lesson, which the class has prepared, so as to end with a good idiomatic translation by the class and a mastery of the syntax.

(b) "No exercise in Latin Composition excites the interest or supplies the discipline that retroversion of the English of past chapters does."—*Laurie*.

(i) Why is this true?

(ii) Write five English sentences, based on the vocabulary and idioms of this passage, for a lesson in Composition.

(iii) Show how you would teach them.

4. At etiam sunt qui dicant, Quirites, a me in exsilium ejectum esse Catilinam. Quod ego si verbo adsequi possem, istos ipsos ejicerem, qui haec loquuntur. Homo enim videlicet timidus aut etiam permodestus vocem consulis ferre non potuit; simul atque ire in exsilium jussus est, paruit atque ivit. Hesterno die, cum domi meae ac paene interfectus essem, senatum in aedem Jovis Statoris vocavi, rem omnem ad patres conscriptos detuli. Quo cum Catilina venisset, quis eum senator appellavit? Quis salutavit? Quis denique ita aspexit ut perditum civem, ac non potius ut importunissimum hostem?

(a) Explain wherein this is a suitable passage for sight translation.

(b) Teach it as a sight lesson.

(c) Show, by an idiomatic translation of this passage, the character of the work you would expect from the pupils.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

PSYCHOLOGY.

Examiners : { W. J. ROBERTSON, B.A., LL.B.
 { WM. PAKENHAM, M.A.

1. Explain and illustrate the relation existing between Feeling, Knowledge, and Will.

2. What relation exists between the Physical factor in Sensation and the Psychical? Discuss.

3. What is KNOWLEDGE? Explain clearly with what *actual knowledge* is concerned. Show the importance from a pedagogical standpoint of accurate ideas on this subject.

4. "When we *know* a thing we *recognize* it: but we cannot recognize anything unless we can connect it with our previous experience."

Discuss this statement, and if it be correct, explain how new knowledge can be gained.

5. Explain and illustrate the pedagogical value of the knowledge and practice of the Laws of Association.

6. Define Attention :

(a) Distinguish between its different forms of activity.

(b) How is non-voluntary attention related to voluntary?
What use can the teacher make of a knowledge of this relationship?

7. Explain clearly the nature and characteristics of Perception. Show the educational importance of clear Perception.

[OVER.]

8. Explain and illustrate the nature of Conception.

- (a) Distinguish between the *image* of a triangle and the *conception* of a triangle.
- (b) Show the importance of *language* in obtaining clear conceptions.

9. Distinguish between Analytic Reasoning and Synthetic.

- (a) "Induction and Deduction are aspects of the same act, and each occurs *through* the other." Discuss.
- (b) Illustrate the statement in (a) above, by reference to the sciences of Algebra and Chemistry.

10. Show the educational value of a proper cultivation of the Emotions.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

SCHOOL ORGANIZATION AND MANAGEMENT.

Examiners : { J. MORGAN, M.A.
L. C. SMITH, B.A.

1. State the general principles that should be observed in constructing a suitable Time-Table for a High School or Collegiate Institute.

2. How would you develop the sense of duty on the part of your pupils?

3. Discuss (a) the educational value of rewards, and (b) the use of commendation as an incentive.

4. How would you deal with (a) laziness, (b) frivolity, and (c) obstinacy?

5. Comment on the italicized portions of the following extract :—

“ To be thoroughly effective, *punishment must be prompt, administered in earnest*, clearly understood, proportioned to the degree of the offence, *suited to the character of the child*, and in *keeping with the nature of the fault*.”

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

SCIENCE OF EDUCATION.

Examiners : { WM. PAKENHAM, B.A.
 { W. H. JENKINS, B.A.

1. (a) Name after Spencer the various classes or categories of human activity, and discuss the relation that modern educational systems should bear to each category.

(b) Estimate the value of Spencer's classification.

2. "Not by precept, though it be daily heard; not by example unless it be followed; but only through action, which is often called forth by the relative feeling, can a moral habit be formed."

Discuss this statement, outlining what should be regarded as the teacher's relation, in *theory* and *practice*, to the moral education of the pupil.

3. State concisely the practical principles of pedagogy that may be based upon each of the following psychological laws:—

(a) To receive a new impression is to notice changes.

(b) Power and tendency are the results of all right mental action.

(c) All actions of consciousness appear to be continually striving to combine with past and simultaneous actions.

4. Discuss fully the importance of *Written Examinations*, pointing out their value, requirements and limitations, and their abuse.

5. "The ultimate objects of the study should always be kept in view that the end be not forgotten in the pursuit of the means."

Show clearly, by outlining your methods, what application you would make of this principle in the teaching of *History*.

[OVER.]

6. "We can, it is true, divide the vital power at the disposal of our will, but it always has its maximum, and that can only be used for one kind of activity in the proportion in which the others rest."

To what extent, and in what way, should this psychological law affect your treatment of *English Composition*?

7. Spencer, in his discussion of the methods and ways of mental development, lays special stress upon the so-called "doctrine of pleasurable self-evolution." Point out the value of such a doctrine, and state definitely how you would apply it to the teaching of *Geometry*.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN SCIENCE.

(FOR PASS CANDIDATES.)

Examiners : { W. H. JENKINS, B.A.
J. D. DICKSON, B.A.

NOTE.—*The interrogative method is to be used in all lessons to be taught.*

1. Teach an introductory lesson in Botany (selecting your own plant) in which the reasoning as well as the observing powers of the pupil will be cultivated.

2. Give, in detail, your method of teaching Zoology, using in illustration any of the types mentioned in the course for the Senior Leaving Examination.

3. Teach the laws of evaporation.

4. Lesson to be taught—Air is matter. What previous knowledge should pupils have?

METHOD 1.—Pupils are not to know the object of the lesson.

The teacher gives the following directions:—"Place a dry tumbler, mouth downward, on the surface of water, and press down vertically and steadily. Write your observations. Remove the tumbler and rub its inner surface with your finger. Record your experience." The teacher obtains the correct observations, having the experiments repeated if necessary, and then asks: "What do these results teach?"

METHOD 2.—Teacher—"You are to prove that air is matter.

All matter occupies space. What must you therefore prove about air?" Answer "It must be shown that air occupies space." Then follow the experiments, performed by the pupils, as in Method 1.

State concisely the essential differences between these two methods, and discuss generally their educational values.

[OVER.]

5. Teach to a Junior Leaving class a practical lesson on the qualitative composition of common salt. At the beginning of the lesson the pupils are not to be told the object of the experiments.

6. A student in Chemistry has in previous work studied water and air, their composition and the properties of their constituents, and has studied the element sulphur. He is given two bottles of a gas unknown to him, with directions to ignite the gas in one bottle and hold a cold white plate in the flame; the gas in the other bottle he is to ignite, and over the tip of the flame to hold a dry wide-mouthed bottle inverted. He finds sulphur formed in the first case and water in the second case.

Indicate, by question and answer, your method of dealing with the subject at this point, and state clearly the object you have in view.

7. (1) Discuss the effects on Methods in Physics of

(a) inadequate equipment,

(b) a course too extensive to be covered practically in the average time devoted to it.

(2) What modifications of Method would you adopt to reduce these bad effects to a minimum?

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN SCIENCE.

(FOR SPECIALISTS.)

Examiners : $\left\{ \begin{array}{l} \text{W. H. JENKINS, B.A.} \\ \text{J. D. DICKSON, B.A.} \end{array} \right.$

NOTE.—*The interrogative method is to be used in all lessons to be taught.*

1. (a) Teach two lessons on the formation of images in plane mirrors, using the following methods :—

- (i) Class instruction to precede the students' experimental work ;
- (ii) The students' experimental work to precede the discussion of this topic.

(b) State the arguments in favor of and against each of the above methods.

2. Teach a lesson on the determination of the internal resistance of a Daniell cell.

By reference to this lesson, justify the opinion you hold in regard to stating the object of the experiments at the beginning of the lesson.

3. (a) Discuss the advisability of teaching the Senior Leaving course in Chemistry by placing the student at work on the qualitative analysis of simple and mixed salts.

(b) Give your method of introducing the Periodic Law.

4. (a) Teach a lesson on the seed of the Indian Corn, dealing with such matter as you think an Honor Science Matriculant should acquire.

(b) Criticize the practice of using "prepared" slides by a beginner in microscopical work in Biology.

[OVER.]

5. (a) The modern teacher of Biology places the specimen to be examined and a Laboratory Manual or Guide, in the hands of his pupils, and they forthwith set to work to verify the statements contained in the Manual.

Discuss the above method and state how you would use such a guide.

(b) Teach a lesson on the leech, having live and alcoholic specimens.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN ENGLISH.

(FOR PASS CANDIDATES.)

Examiners: { L. C. SMITH, B.A.
F. C. COLBECK, B.A.

NOTE.—When candidates employ the method of question and answer, they must supply answers to all questions asked. To shorten work, the method of question and answer may be dropped after a few examples have been given.

1. Suddenly rose from the south a light, as in autumn, the *blood-red*
Moon *climbs the crystal walls of heaven*, and o'er the horizon
Titan-like stretches its hundred hands upon mountain and meadow,
Seizing the rocks and the rivers, and piling huge shadows together.
- 5 Broader and ever broader it gleamed on the roofs of the village,
Gleamed on the sky and the sea, and the ships that lay in the
roadstead.
Columns of shining smoke uprose, and flashes of flame were
Thrust through their folds and withdrawn, like the quivering hands
of a martyr.
Then as the wind seized the *gleeds* and the *burning thatch*, and up-
lifting,
- 10 Whirled them aloft through the air, at once from a hundred house-
tops
Started the *sheeted smoke* with flashes of flame intermingled.

EVANGELINE.

Teach a lesson on the above poem to a Junior Leaving class, under the following heads:—

- (a) A concise tabulated plan of the passage.
- (b) Explanation of the parts italicized.
- (c) Development of the comparisons in lines 1–5, and lines 7 and 8.
- (d) The metre. Illustrate from lines 10–11.

[OVER.]

2. You are to teach a lesson to a Primary class on subordinate clauses and their relations. Your students furnish you with the following examples:—

- (i) I call to *what* I feel is Lord of all.
- (ii) Alas *for* love, if thou wert all
And naught beyond, O Earth !
- (iii) If I be *what* I am grossly called,
What should be granted which your own gross heart
Would reckon *worth* the *taking*?
- (iv) An occurrence put it beyond a doubt that he intended *to become one* of the family.
- (v) No sooner had ye parted from us
Than Launcelot told us of a common talk
That men went down before his spear at touch,
But knowing he was Launcelot.
- (vi) Hadst thou been here my brother had not died.
- (vii) The pool *wherein* we lost it, is so many *feet deep* that one cannot see the bottom.

(a) Select, classify and give relation of the subordinate clauses in the above.

(b) Explain fully how you would deal with the following:—

- (1) A student asks for the kind and the relation of the words italicized.
- (2) He asks for the mood of "*wert*", (ii); "*be*," "*should*," "*would*," (iii); "*hadst*" and "*had*," (vi). Make this plain.
- (3) He asks for the definition and an illustration of the terms *phrase* and *clause*. Illustrate from (i).

3. The Sergeants made proclamation. Hastings advanced to the bar and bent his knee. The culprit was indeed not unworthy of that great presence. He had ruled an extensive and populous country, and made laws and treaties, had sent forth armies, had set up and pulled down princes. And in his high place he had so borne himself that all had feared him, that most had loved him, and that hatred itself could deny him no title to glory, except virtue. He looked like a great man, and not like a bad man. A person small and emaciated, yet deriving dignity from a carriage which, while it indicated deference to the court, indicated also habitual self-possession and self-respect, a high and intellectual forehead, a brow pensive, but not gloomy, a mouth of inflexible decision, a face pale and worn, but serene, in which was written, as legibly as under the picture in the council-chamber at Calcutta, *Mens aequa in arduis*; such was the aspect with which the great proconsul presented himself to his judges.

Teach a half-hour lesson in Rhetoric on the above passage under the following heads:—

- (a) Topic and topic-sentence.
- (b) Plan of paragraph.
- (c) Explicit Reference.
- (d) Methods of securing Clearness and Melody.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN ENGLISH.

(FOR SPECIALISTS.)

Examiners: { L. C. SMITH, B.A.
 { F. C. COLBECK, B.A.

NOTE.—*When candidates employ the method of question and answer, they must supply answers to all questions asked. To shorten work, the method of question and answer may be dropped after a few examples have been given.*

1. Take wings of fancy and ascend,
 And in a moment set thy face
 Where all the starry heavens of space
 Are sharpened to a needle's end.
- Take wings of foresight; lighten through
 The secular abyss to come,
 And lo, *thy deepest lays are dumb*
 Before the mouldering of a yew ;
- And *if the matin songs that woke*
 The darkness of our planet, last,
 Thine own shall *wither in the vast*
 Ere half the lifetime of an oak.
- Ere *these have clothed their branchy bowers*
 With fifty Mays, thy songs are vain ;
 And *what are they when these remain*
 The ruined shells of hollow towers ?

IN MEMORIAM, LXXVI.

Teach a lesson on the above poem to a Senior Leaving class, under the following heads :—

- (a) A concise tabulated plan of the poem.
- (b) Explanation of parts italicized.
- (c) Laws of Rhyme. Illustrate from stanza 2.

(OVER).

2. You are to teach a lesson to a Primary class on subordinate clauses. Your students furnish you with the following examples:—

- (i) *Being good* is better than being bad.
- (ii) His being *king* displeased the nobles, for who could reverence such a king *as* he?
- (iii) Her lips who had devised the letter moved yet again.
- (iv) Hadst thou been here, my brother had not died.
- (v) Full simple was her answer, "*What* know I?
My brethren have been all my fellowship,
And I, when often they have talked of love,
Wished it had been my mother; for they talked,
Meseemed, of *what* they knew not; *so myself*—
I know not if I know *what* true love is;
But if I know, then, if I love not him,
Methinks *there* is *none* other that I love."

(a) Select, classify, and give the relation of the subordinate clauses in the above.

(b) Explain fully how you would deal with the following:—

- (1) A student asks for the parsing of the italicized words.
- (2) A discussion arises as to whether the following are principal or subordinate:—"who could—king", (ii); "they talked," (v); "Meseemed," (v); "methinks", (v). Make this clear.
- (3) A student asks the mood of "could," (ii); "hadst" and "had", (iv); "had been", (v).

3. They climbed the rock-built breasts of earth,
The Titan-fronted, blowy steeps
That cradled Time. Where Freedom keeps
Her flag of white-blown stars unfurled,
They turned about, they saw the birth
Of sudden dawn upon the world;
Again they gazed; they saw the face
Of God and named it boundless space.

And they descended and did roam
Through leveled distances set round
By room. They saw the silences
Move by and beckon; saw the forms,
The very beards, of burly storms,
And heard them talk like sounding seas
On unnamed heights, bleak-blown and brown,
And torn like battlements of Mars,
They saw the darkneses come down,
Like curtains loosened from the dome
Of God's cathedral, built of stars.

They pitched the tent where rivers run
As if to drown the falling sun,
They saw the snowy mountains rolled
And heaved along the nameless lands
Like mighty billows ; saw the gold
Of awful sunsets ; saw the blush
Of sudden dawn ; and felt the hush
Of heaven, when the day sat down
And hid his face in dusky hands.

JOAQUIN MILLER : *Ship in a Desert.*

You have the above poem as a lesson in Supplementary Reading for a Junior Leaving class. Take the successive poetic pictures and present them in such a way that their beauties shall be apparent to the class.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN FRENCH AND GERMAN.

(FOR PASS CANDIDATES.)

Examiners : { L. H. ALEXANDER, M.A.
WM. PAKENHAM, M.A.

1. "Ja, Herr Schatzhauser," erwiderte Peter mit einer tiefen Verbeugung, "es war mir recht bange. Aber ihr seid wohl der Herr Auerhahn gewesen, der die Schlange tot gebissen; da bedanke ich mich schönstens.—Ich komme aber, um mich Rats zu erholen bei euch; es geht mir gar schlecht und hinderlich, ein Kohlenbrenner bringt es nicht weit; und da ich noch jung bin, dünkte ich doch, es könnte noch was Besseres aus mir werden; wenn ich oft Andere sehe, wie weit die es in kurzer Zeit gebracht haben, wenn ich nur den Ezechiel nehme und den Tanzbodenkönig, die haben Geld wie Heu."

Teach the foregoing as a lesson in translation, and give an acceptable rendering of it.

2. How would you teach the objective personal pronouns in French? Illustrate freely, with French sentences, the steps of your answer.

3. Outline a lesson for pupils who confuse the uses of *sein* and *werden* with the past participle. Add a short exercise to test the pupils' comprehension of the lesson.

4. State clearly the steps by which you would introduce to a class the idiomatic forms in such sentences as:—

(a) Les voilà dans la boîte.

(b) Je n'ai pas assez faim.

(c) Il demande une pomme à sa mère.

(d) Il la lui fait bâtir.

[OVER.]

5. Give a good general idea of the methods you would use, as well as those you would avoid, in teaching in French

(a) The rendering of conditional sentences.

(b) The forms of the irregular verbs.

6. Explain how you would teach the distinction between *auf*, *in*, *nach* and *zu*, with names of places.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

METHODS IN FRENCH AND GERMAN.

(FOR SPECIALISTS.)

Examiners : { L. H. ALEXANDER, M.A.
 { WM. PAKENHAM, M.A.

1. "Je rentre ; je vais à la niche pour voir Zéro, car je suis plus bête que lui, et j'ai fini par ne plus pouvoir m'en passer. Plus de chien ! ni vu ni connu ! Je m'informe. Les gens de l'hôtel ne peuvent rien me dire. C'est toujours comme cela ! Je ne sais que faire ! Je me donne au diable, qui ne veut pas de moi. Je cours au bateau : Zéro n'y est pas, et il n'y est pas venu ! Mais le mousse, qui a plus de malice qu'il n'est gros, prétend qu'il l'a vu passer se dirigeant vers l'avant-port. Je veux en avoir le coeur net, et je m'y rends pour me renseigner."

(a) Teach this passage as a lesson in translation.

(b) Write this extract in *indirect narration* in English, and show how you would use your version as a lesson in French composition.

2. With the following and similar sentences, show clearly how you would give a lesson on the use of *participial constructions* in German:—

(a) By persuading others, we persuade ourselves.

(b) He insisted upon getting up.

(c) We heard of his having become a soldier.

(d) He lent me a book containing many tales.

(e) They came galloping down the street.

3. Indicate the plan of a lesson for pupils who confuse the uses of *devoir* and *falloir*.

[OVER.]

4. How would you teach such adverbs as *noch*, *doch*, *schon*, *ja*, so as to encourage students to use them freely and intelligently?

5. Describe somewhat in detail how you would conduct, with advanced students, lessons of literary as well as grammatical value on the comparative uses in French and German of:—

- (a) The General and the Partitive Noun;
- (b) The Reflexive Verb.

Education Department, Ontario.

WRITTEN EXAMINATION, DECEMBER, 1895.

PROVINCIAL SCHOOL OF PEDAGOGY.

HISTORY OF EDUCATION.

Examiners : { W. BRIDEN, B.A.
 { L. H. ALEXANDER, M.A.

1. "To prepare us for complete living is the function which education has to discharge."—*Spencer*.

(a) Give Spencer's views as to the way in which this ideal of education can be best attained.

(b) Sketch Quick's objections to Spencer's curriculum, and give your own views on the subject.

2. Give an account of the principles and methods Basedow attempted to carry out in the Philanthropinum, and state how far you think these should be adopted.

3. (a) What is meant by the Renaissance?

(b) What was the Renaissance Ideal in Education?

(c) Give your opinion as to what in this Ideal is commendable, and also as to what you consider mischievous in its results.

4. Explain why Rabelais is worthy of being called an Educational Reformer.

5. "It would have been a vast gain to all Europe if Mulcaster had been followed instead of Sturm."—*Quick*.

Institute a comparison between the systems and principles of Mulcaster and Sturm, to show the correctness of Quick's opinion.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

COMMERCIAL SPECIALISTS.

COMMERCIAL ARITHMETIC.

Examiners: { R. H. ELDON.
W. H. FLETCHER.

1. Construct tables for the following, showing the results in tabular form, for the 1st, 70th, and n^{th} years, correct to five places of decimals, reckoning compound interest at 5 % per annum:

- (a) Amount of \$1.00, paid at the beginning.
- (b) Present value of \$1.00, due at the end.
- (c) Amount of \$1.00 per annum, paid at the end of each year.
- (d) Present value of \$1.00 per annum, paid at the end of each year.
- (e) Annuity which \$1.00 will purchase.

Given $\log 1.05 = .0211893$.

$\log 3.286616 = .5167490$.

$\log 3.042642 = .4832510$.

2. An assignee requires a settlement of the following account on Feb. 4, 1894. Find, by equating the time, the amount due, money being worth 6 % per annum:

1893.					1893.				
Nov.	1	To Balance.....	130	00	Dec.	25	By Mdse., 30 days ...	200	00
	30	" Mdse., 3 mos.	70	00	1894.				
1894.					Jan.	15	" Note, 30 days.....	25	00
Jan.	10	" " 60 days	160	00		15	" Cash.....	20	00
	15	" " net....	20	00		20	" By Note, 1 mo....	100	00

3. A Canadian corporation requires to make a payment of £500000 sterling in London, Eng., to-day, or within 10 days with interest for the extra time. Money being worth 2 % per annum, show which of the following ways, quoted from a daily newspaper, would be the most profitable, and by how much:

Stg. 60 days (sight) at $9\frac{3}{4}$ — arrive in 10 days.

" demand at $10\frac{1}{8}$ — " " 10 "

" cables at $10\frac{3}{16}$ — " to-day. [OVER.]

4. *A* admits *B* as partner on Jan. 1, 1894, requiring only his time and experience in lieu of investment. Interest at 6 % per annum is to be allowed on investments, and charged on withdrawals; *B* is to receive a salary of \$900 per annum; and the remaining profits or losses are to be divided equally. The following is the state of the business:—Merchandise on hand, \$10000; Cash, \$500; Bills Receivable, \$900; Accounts Receivable, \$700; Bills Payable, \$1550; Accounts Payable, \$1030. They rent a store at \$300 per annum, and engage clerks at \$600 per annum. *A* withdraws \$500 on Aug. 7, and \$300 on Oct. 19. At the close of the year they find:—Merchandise on hand, \$9000; Merchandise sold, \$20000; Merchandise purchased, \$13500; Bills Receivable, \$750; Accounts Receivable, \$1500; Bills Payable, \$600; Accounts Payable, \$1000; Rent paid, \$200; Clerks' Salaries paid, \$500; Running Expenses, \$250; and receipts for services as Post Master, \$210. Determine, from the above, the balance of cash on hand, and *A*'s net capital.

5. A sum of \$60000 is borrowed at $4\frac{3}{4}$ % compound interest, to be repaid in 35 equal annual payments. What will be the amount of each? What portion of the tenth payment will be on account of interest and the debt respectively?

Given $\log 1.0475 = .02015403$,
 $\log 1.970647 = .29460895$,
 $\log 3.134362 = .49614925$.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

COMMERCIAL SPECIALISTS.

INDUSTRIAL DESIGN AND BLACKBOARD AND
MEMORY DRAWING.

Examiners: { W. H. FLETCHER.
R. H. ELDON.

A.

INDUSTRIAL DESIGN.

NOTE.—*Instruments to be used. Units of design may be repeated mechanically by means of tracing paper. Renaissance drawings are supplied as a basis of designs—*
NOT AS COPIES, NOR FOR MERE MODIFICATION.

1. (a) Define and illustrate by drawings :—unit of design, balance, symmetry, repose.

(b) Illustrate the different methods of repeating units of design and repeat a conventional unit so as to produce the opposite of 'repose'.

2. (a) Make drawings to illustrate skeletons on which curvilinear patterns are built.

(b) Treat one of these skeletons to illustrate 'pattern dissection'.

3. (a) What are the main advantages of the 'drop' pattern?

(b) Make drawings to illustrate your answers.

4. Discuss briefly

(a) ceiling decoration,

(b) designs for wall decorations,

(c) designs for floor coverings.

[OVER.]

B.

BLACKBOARD AND MEMORY DRAWING.

NOTE.—*Sketch to be purely freehand, with crayon or pencil.
Shading allowed and arrangement optional.*

1. Sketch :—Private residence, with cottage roof, front and side verandahs ; lawn with summer house, tent, rustic seats, other details at pleasure.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

COMMERCIAL SPECIALISTS.

BOOK - KEEPING.

Examiners: { R. H. ELDON.
W. H. FLETCHER.

1. (a) Distinguish:—Bill and Invoice; Order, Draft, and Bill of Exchange; Promissory Note, Bond, and Debenture; Statements of Receipts and Disbursements, of Income and Expenditure, and of Profit and Loss.

(b) Explain “The A. McIntyre Co., Ltd.”

2. (a) How does a city or town council make provision for the general and special expenditure? Make journal entries to show what accounts should be opened in the ledger.

(b) F. buys from T. Pierce & Co., London, Eng., Mdse. invoiced at £200, on 2 months' time, when exchange is $9\frac{1}{2}$. When due, he remits the amount, exchange then being at 9. Make F.'s entries.

3. On Nov. 30, *A* bought from *B*, on account, 30 tons Coal @ \$6, for use. He closed his books at the end of the year, and his Balance Sheet showed:—15 tons Coal on hand, the price having dropped to \$5.50; three months' rent accrued \$90; interest accrued on note against *C* \$30; &c. Three months later, when Coal has again dropped 50c. per ton, he pays for it in cash, and also for rent due to date \$180; *C* also pays his note \$1000 and interest \$45. On June 30, he again closes his books, having paid the quarter's rent \$90. Show how the given transactions of the preceding six months will affect the Net Capital, and by how much.

[OVER.]

4. Rule a form of Cash Book, and make it a book of original entry for the transactions below. Arrange it with special columns, so that mdse. sales and items of expense may be posted in totals. Close your Cash Book, and make it indicate that the posting is done :—

- (a) Cash on hand \$300.
- (b) Prepaid my note of \$100, discount off \$5.
- (c) Sold R. Shaw, for cash, Mdse. \$200.
- (d) Bought of T. Grant, for cash, 5 tons Coal @ \$5.
- (e) L. Jones paid his note \$100, and interest \$5.
- (f) Returned L. Moore & Co., Mdse. \$30, receiving their cheque on Traders' Bank.
- (g) Paid clerk's salary \$75.

5. *A* sends *B* 1000 bbls. Flour, invoiced @ \$4.75, to be sold on joint account and risk of *A*, *B*, and *C*, each $\frac{1}{3}$. *B* is authorized to add 500 bbls. more at the same price, and buys them from *D* on account @ \$4.50. He then sells *K* for cash 1200 bbls. @ \$5.50, and ships the balance to *M* @ \$5 on his own account and risk. He charges storage 3c. per bbl., insurance \$15, commission 3% on sales, and remits *A* and *C* the amounts due them, in cash. What journal entries will *A*, *B*, and *C* make in their respective books?

6. The firm, *X*, *Y*, and *Z*, are compelled to assign. Their books on investigation show results as follows:—Creditors unsecured, \$42100; Creditors for rent and salaries, \$600; *X*'s Capital, \$3000; *Y*'s Capital, \$2500; *Z*'s Capital \$2000; Debtors, \$21420, of which \$800 is doubtful (estimated at \$300), and \$1420 is bad; Cash on hand, \$2100; Mdse., \$6180; Real Estate, \$2600; Bills Receivable, \$1400, of which \$100 is bad; Gains, \$13900; Losses, \$8200; their withdrawals—\$8,000, \$7200, and \$7000 respectively. Make statements for the creditors showing (a) how the affairs stand, and (b) what gives rise to the deficiency.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

COMMERCIAL SPECIALISTS.

PLANE AND SOLID GEOMETRY, AND PERSPECTIVE.

Examiners: $\left\{ \begin{array}{l} \text{W. H. FLETCHER.} \\ \text{R. H. ELTON.} \end{array} \right.$

NOTE. — *All construction lines must be shown.*

A.

PLANE AND SOLID GEOMETRY.

1. Given a circular plot 40' in diameter, find, by geometric construction, the radius of a circular piece of ground three-eighths the area of the first. (Scale $\frac{1}{120}$.)

2. (a) Construct a diagonal scale to show seventy-seconds of an inch.

(b) Take off the following measurements, explaining clearly how they are obtained: $3\frac{1}{2}"$, $2.83"$.

3. A pentagonal prism pierces a circular slab and protrudes equally upon both sides of it. The axes of the two solids are in one straight line perpendicular to their parallel faces. Determine a plan of the whole when their axes are parallel to the vertical plane, and one corner of the prism and an edge of the slab rest upon the horizontal plane. Diameter of slab 3", thickness $\frac{1}{2}"$. Axis of prism 3", edges of pentagonal ends 1".

B.

PERSPECTIVE.

4. H. 4'. D. 15'. Scale $\frac{1}{24}$

A regular octagonal prism 6' long rests on one of the edges of one of the octagonal ends, and is so placed that its axis is at an angle of 40° to the ground and in a vertical plane which inclines to the right at an angle of 60° to P. P. The nearest point on the ground is directly in front and is 6' from the P. P. The side of the octagon is 2'. Show this solid in perspective.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

COMMERCIAL SPECIALISTS.

BANKING.

Examiners: { R. H. ELDON.
 { W. H. FLETCHER.

1. Write briefly on the organization of a bank under the following headings :

- (a) Act of Incorporation—substance and how obtained.
- (b) Capital—amount, shares, and calls.
- (c) Directors—number and qualifications.
- (d) Note issue—limit and security to holders.
- (e) Commencing business—certificate and requirements before it is granted.

2. Who are liable for the impairment of the paid-up capital of a bank, through losses or declaring of dividends? How is this impairment made good?

3. Name the different ways in which the use of metallic money may be avoided. What would be the advantages and disadvantages of an international currency?

4. Explain and state the merits and demerits of the following systems of standards of value:—single, double, multiple, and tabular. What standards have England, Canada, United States, Germany, France, India, Russia, and China?

5. Distinguish *money*, *cash*, and *coin*. How did these originate?

6. What now prevents brokers from selling bank shares on “margin”?

7. Name the various ways in which a Toronto merchant may discharge debts due in Toronto, Hamilton, New York, or Liverpool.

[OVER.]

8. (a) Who are incompetent parties to a bill?

(b) What is the effect of dating on Sunday, omission of date, or insertion of wrong date?

(c) When are bills payable on demand, to bearer, to order, or to payer only, at any stage in their history?

(d) Explain "crossing cheques". Why is it done?

9. What are material alterations in negotiable paper? How is the holder affected thereby?

10. What signature is necessary, or sufficient, on a promissory note, made by a person, firm, bank, or any corporation?

11. State the requisites of an acceptance. How may an acceptance be qualified, and how should the payer treat such? What time should be allowed for acceptance before protesting? In case of the dishonor of a bill, what steps may be taken, and what only are necessary, in connection with bills and promissory notes, both foreign and inland?

12. In estimating the value of a debt, what circumstances should be taken into consideration? Why are notes of individuals or of corporations often held in large quantities, in preference to bank notes or even gold?

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

COMMERCIAL SPECIALISTS.

MODEL AND FREEHAND DRAWING.

Examiners: { W. H. FLETCHER.
 { R. H. ELTON.

A.

MODEL DRAWING.

NOTE.—*The drawing is to be pure outline; no shading allowed. No instruments, other than a pencil, to be used.*

Draw the group placed before you by the examiner.

GROUP:—A medium-sized oblong table, having on it near one end, a large water pitcher, a tray, and several goblets, and, on its other end, a gentleman's silk hat, cuffs and collar. In front of the table, with one side touching it, stands a large arm chair.

B.

FREEHAND.

NOTE.—*No instruments but a pencil to be used.*

Copy the form given you by the presiding examiner, making it somewhat smaller.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

COMMERCIAL SPECIALISTS.

STENOGRAPHY.

Examiners: { R. H. ELTON.
W. H. FLETCHER.

NOTE.—*Illustrate your answers.*

1. (a) Write *ch ch*, *l R*, *ll*, *n n*, and *pr* in shorthand, and indicate by figures the places between them of first, second, and third place vowels (i) long and (ii) short.

(b) When is circle *s* employed?

(c) When may *tick h* and *dot h* be used respectively?

2. (a) State the rules for writing final *l*.

(b) Show how *st* loop and *sw* circle are prefixed to the *pr* series of consonants. When should the separate strokes be used instead of the loop and circle?

3. (a) How are words ending in the sound *ens* distinguished from those ending in the sound *enz*, in writing shorthand?

(b) Explain the terms logogram and grammalogue. Write the characters for *too*, *and*, *who*, *should*, *ought*, and *is*, and state in what direction they are written.

4. (a) How does the halving principle apply to *t*, *b*, *m*, *h*, and *mp*? When is half-length *l* written upward?

(b) When may straight strokes be written double-length, and what is added thereby? How are they distinguished from the same consonant written twice?

5. (a) When may initial *w* be represented by a jointed vowel sign?

(b) To what consonant strokes may final *i*, *ow*, and *u* be joined?

[OVER.]

6. (a) Write words in shorthand, containing the following prefixes and affixes:—com, cog, enter, magni, in (hook), ing, ings, arity, mental, and selves.

(b) Write in shorthand, using the recognized briefest forms: kicked, picked, altogether, enlarge, delivery, sway, awhile, improvement, administration, influenced, corkscrew, therefore, usual, stamped, interest, exhaustion, objection, swagger, squarish, sensuous, season, administers, channel, steeper, national, cohort, better than, I will, on the, irritant, lessening, annoyed, followed, understand, mystify, prater, laughter, midnight, Iowa, India, clayey, latter, ladder, perpetuation, superficial, edited, transitional, control of the mind.

(c) Write in longhand the shorthand extract to be supplied by the presiding examiner. Enclose the extract with your answer paper.

Education Department, Ontario.

ANNUAL EXAMINATIONS, 1895.

COMMERCIAL SPECIALISTS.

PENMANSHIP.

Examiners: { W. H. FLETCHER.
 { R. H. ELDON.

1. Write separately and in order, each of the letters, capital and small, of an engrossing alphabet.

2. Write separately and in order, each of the letters, capital and small, using the vertical system of Penmanship.

3. What are the most desirable qualities of a system of Penmanship?

4. Explain the chief characteristics of each of the following movements:—"finger", "combined", "muscular".

5. Write the following, engrossing the italicised parts:—

I, William Henry Brown, of the City of Belleville, in the County of Hastings, and Province of Ontario, Canada, being of sound mind and memory, and considering the uncertainty of this frail and transitory life, do therefore make and declare this to be my last Will and Testament, that is to say:

First.—After all my lawful debts and funeral expenses are paid and discharged *I Bequeath* to my wife, *Laura Brown*, the dwelling house and land connected therewith which we now occupy as a homestead.

Second.—I give to my daughter, *Jane*, four thousand dollars cash, and thirty shares in the *Bank of Montreal*, for her sole use and the use of her heirs at her discretion.

Third.—I give to my son *William* all my real estate in the *Township of Thurlow, County of Hastings, Province of Ontario*, and all the live stock and implements, used for farming purposes in connection with the same.

[OVER.]

Fourth.—I hereby appoint my son *William* to be executor and my wife *Laura* executrix of this my last will and testament, hereby revoking all former wills by me made. *And I appoint* my said wife and *Robert Hugh Smith*, of the *City of Belleville*, aforesaid, guardians of my infant children.

In Witness Whereof, I, the testator, have hereunto set my hand and seal this first day of May, in the year of our Lord, one thousand eight hundred and ninety-two.

Signed, sealed, and delivered by
the testator, in the presence of
us, who, at his request and in the
presence of each other, have
hereunto subscribed our names
as witnesses.

THOMAS STRONG,
of Cobourg, Ont.

PETER FARNOR,
of Belleville, Ont.

WILLIAM H. BROWN.

